

**THE**

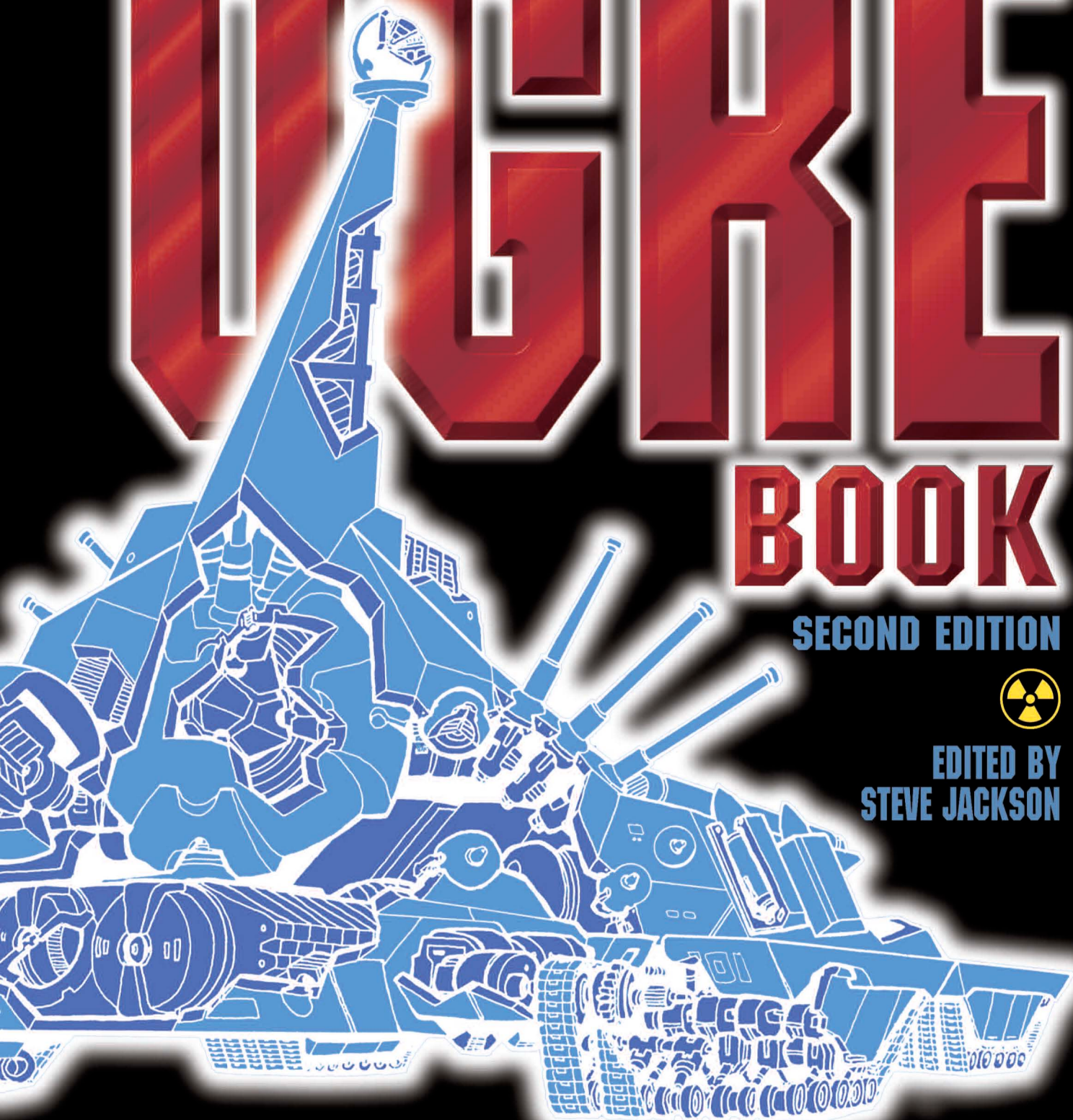
# **OOGRE**

**BOOK**

**SECOND EDITION**



**EDITED BY  
STEVE JACKSON**



**STEVE JACKSON GAMES**



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**SCENARIOS  
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**NEW UNITS  
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*Ogre* and its sequel, *G.E.V.*, are among the best-selling wargames of all time, with well over 100,000 copies in print. *Ogre Miniatures* won the Origins Award for Best Miniatures Rules of 1992. Now the *Ogre* is back, bigger than ever.

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SECOND EDITION, FIRST PRINTING  
PUBLISHED DECEMBER 2000

ISBN 1-55634-461-9



9 781556 344619

5 1995



SJGO1995 3202

Printed in the  
USA.



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[www.sjgames.com](http://www.sjgames.com)

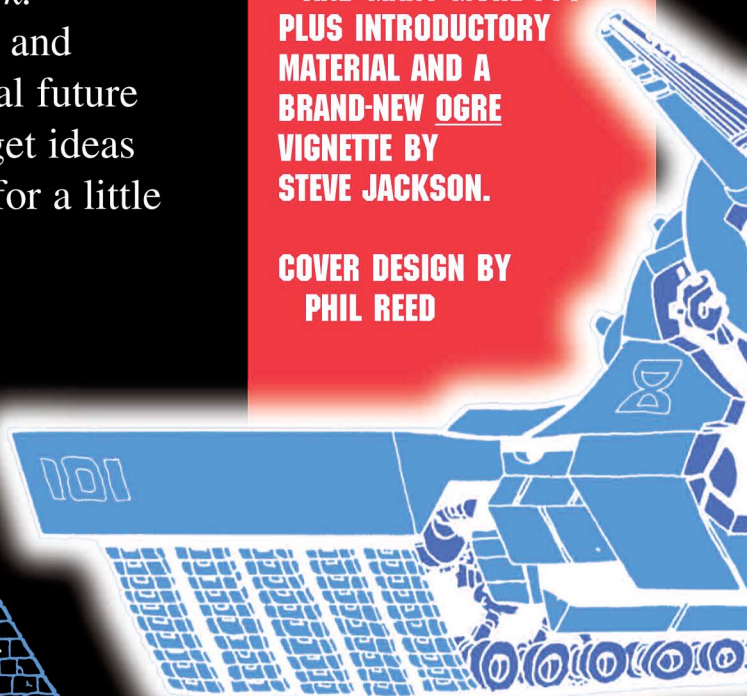


**EDITED BY  
STEVE JACKSON**

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GREG COSTIKYAN  
DAVID PULVER  
AND MANY MORE . . .**

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MATERIAL AND A  
BRAND-NEW OGRE  
VIGNETTE BY  
STEVE JACKSON.**

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# THE

# SECOND EDITION

# OGRE<sup>®</sup> BOOK

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ISBN 1-55634-461-9

1 2 3 4 5 6 7 8 9 10

# STEVE JACKSON GAMES

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## OGRE ONLINE

We have a large and growing web area devoted to *Ogre*. In fact, many of the articles in this book have been posted there for years, along with lots of other articles, scenarios, and commentary. Check it out: [www.sjgames.com/ogre/](http://www.sjgames.com/ogre/). Thanks go to Richard Meaden for the site’s great graphic design, and to Fish Flowers, who maintains the *Ogre* pages.

A few pages especially worth checking out:

- Richard Meaden’s “Last War” pages at [www.sjgames.com/ogre/lastwar/](http://www.sjgames.com/ogre/lastwar/)
- The checklist of available miniatures at [www.sjgames.com/ogre/miniatures/checklist.html](http://www.sjgames.com/ogre/miniatures/checklist.html)
- The ludography at [www.sjgames.com/ogre/resources/ludo.html](http://www.sjgames.com/ogre/resources/ludo.html)

For continuing online discussion of *Ogre*, there are two choices. *Pyramid* subscribers can access a message board devoted to *Ogre* (which we sometimes use to playtest rules questions or get other feedback about the game and game world). To subscribe, go to [www.sjgames.com/pyramid/](http://www.sjgames.com/pyramid/). And Henry Cobb has, for years, run an *Ogre* mailing list for general discussion – to subscribe, write to [ogre@sjgames.com](mailto:ogre@sjgames.com).



# INTRODUCTION

When it was published in 1982, *The Ogre Book* was the first book entirely dedicated to commentary on one adventure game. The literature on chess and backgammon is immense, and I've seen one very good book on *Monopoly* strategy, but there was nothing devoted to the adventure gaming hobby. There have been others since then – most notably, dozens of books on *Magic* – but this volume was the first of its kind.

Certainly the interest is there. *Ogre* was released in 1976, and *G.E.V.* followed soon after . . . and within 5 years, more than 100,000 copies had been sold. The miniatures rules won the Origins Award in 1992, and so did the miniatures themselves. The game has always been in print since its first release, in one version or another; the miniatures were unavailable for years, until popular demand forced us (twist my arm!) to set up our own casting division to produce them. And now *GURPS Ogre* offers a roleplaying version of the *Ogre* world.

So it was time to reissue *The Ogre Book*. This second edition is much larger than the first; we've added 19 new items. I have written a brief introduction for each article just to add a historical perspective, as well as to point out non-canon elements in the fiction, or places where the rules or background were later changed.

Many of these articles originally appeared in various magazines; a few have appeared only on the web, and some are new in this book. Except where noted, all of the older articles have been re-edited (and re-playtested, where necessary) to conform with the most recent editions of the games.

*Ogre* was originally designed as a diversion . . . a simple science fiction game about giant tanks. The “conventional” units were there mostly to provide targets! In the second edition of *Ogre*, and even more in *G.E.V.*, greater effort went toward realism. Now it seems that many of the features found in the *Ogre/G.E.V.* units will actually show up in future combat vehicles.

How soon? Maybe sooner than we think. A few excerpts from recent U.S. Army publications:

*On computer-controlled vehicles:* “. . . People are slow movers . . . we must take advantage of technology to pre-insert judgments and let our machines fight for us.”<sup>1</sup>

*On the “missile tank” concept, from a description of a unit already (in mid-1980!) in production:* “The MLRS is a highly mobile, automated rocket system that permits a 3-mm crew with minimum training to accurately shoot a complete 12-rocket load, quickly reload, and fire again . . . the onboard fire control computer does most of the work . . . the large 25-ton tracked vehicle is 6.9 meters long (almost 23 feet), 2.5 meters high (almost 9 feet) and 2.9 meters wide (almost 10 feet).”<sup>2</sup>

*On fast armored vehicles – not GEVs, but for the same mission:* “The HIMAG (High Mobility-Agility) II-A Test measured the effects of target mobility and agility on the hitting performance of antitank systems. In this test, gunners of M60-A1 tanks and TOWs mounted on M-113s tracked and dry fired at highly evasive targets maneuvering on an airfield runway. Results indicated a definite and significant payoff for agility against tank gun systems . . .”<sup>3</sup>

Indeed (as Charles R. Bowles points out in “Tank: Present, Future, Ogre” on p. 9) the biggest flaw in the *Ogre* / *G.E.V.* predictions may be that they're set too far in the future.

Which is an interesting idea, if not particularly comforting. What's that rumbling sound I hear outside . . . ?

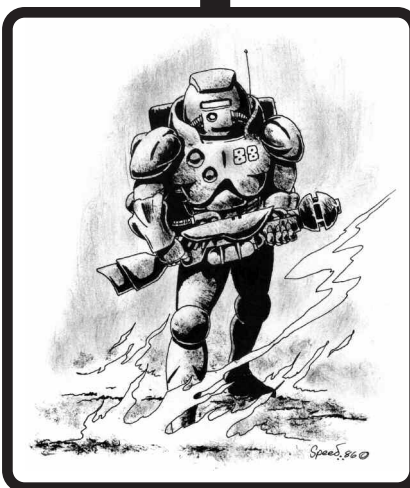
– Steve Jackson

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1. “Artillery Fire: Fast or Massed?”, LTG (Ret.) David E. Ott, *Field Artillery Journal*, January-February 1982.

2. “MLRS: The Soldier's System,” Mary L. Corrales, *Field Artillery Journal*, July-August 1980.

3. “Developing Tomorrow's Combat Vehicles,” Col. Lawrence B. Fitzmorris, *Armor*, May-June 1980.



This was my original “designer’s article,” published in issue 9 of *The Space Gamer* in late 1976. It explained how the game came to be, and the rationale behind the idea of a multi-gun supertank. On the whole, I think the article holds up pretty well. The game system really did develop pretty much the way I predicted it would, except that the infantry game, *Battlesuit*, wasn’t actually compatible . . . the scale was different.

The most dated thing about this article is the references to two long-gone, much-lamented magazines. *S&T* was

SPI’s *Strategy & Tactics*. *TSG* was *The Space Gamer*, published first by Metagaming and then by Steve Jackson Games. We sold it in 1985, and it didn’t survive long after that; eventually we realized what idiots we’d been, and started a new magazine, *Pyramid*. In its turn, *Pyramid* ran a number of good *Ogre* articles (and, in its online incarnation, it’s still doing so). But this was the very first *Ogre* material, after the game itself, to see print . . .

## NOTES ON THE OGRE

By Steve Jackson

*The command post was well guarded. It should have been. The hastily constructed, unlovely building was the nerve center for Paneuropean operations along a 700-kilometer section of front – a front pressing steadily toward the largest Combine manufacturing center on the continent.*

*Therefore, General DePaul had taken no chances. His command was located in the most defensible terrain available – a battered chunk of gravel bounded on three sides by marsh and on the fourth by a river. The river was deep and wide; the swamp, gluey and impassable. Nothing bigger than a rat could avoid detection by the icons scattered for 60 kilometers in every direction over land, swamp, and river surface. Even the air was finally secure; the enemy had expended at least 50 heavy missiles yesterday, leaving glowing holes over half the island, but none near the CP. The Combine’s laser batteries had seen to that. Now that the jamscreen was up, nothing would get even that close. And scattered through the twilight were the bulky shapes of tanks and ground effect vehicles – the elite 2033rd Armored, almost relaxed as they guarded a spot nothing could attack.*

*Inside the post, too, the mood was relaxed – except at one monitor station, where a young lieutenant watched a computer map of the island. A light was blinking on the river. Orange: something was moving, out there where nothing should move. No heat. A stab at the keyboard called up a representation of the guardian units . . . not that any should be out there, 30 kilometers away. None were. Whatever was out there was a stranger – and it was actually in the river. A swimming animal? A man? Ridiculous.*

*The lieutenant spun a cursor, moving a dot of white light across the map and halting it on the orange spot with practiced ease. He hit another key, and an image appeared on the big screen . . . pitted ground, riverbank . . . and something else, something rising from the river like the conning tower of an old submarine, but he knew what it really was, he just couldn’t place it . . . and then it moved. Not straight toward the camera icon, but almost. The lieutenant saw the “conning tower” cut a wake through the rushing water, bounce once, and begin to rise. A second before the whole shape was visible, he recognized it – but for that second he was frozen. And so 30 men with their minds on other things were suddenly brought to heart-pounding alert, as the lieutenant’s strangled gasp and the huge image on his screen gave the same warning . . .*

“OGRE!”

\* \* \*

Every so often you throw logic and reason out the window and do something because you feel like it, regardless of whether it makes any sense. And occasionally, when you’re through, it works. That’s what happened with *Ogre*.

Like many people, I’m fascinated by tanks. Nice image: all that compact power and invulnerability. SF stories like Colin Kapp’s *Gottlos* and Laumer’s *Bolo* tales fed that fascination – imagine something tank-strong and human-smart. So one of the things I really wanted to put into a wargame was the intelligent tank.

But there is one small problem. Tanks seems to be on their way out. Present anti-tank technology (air attacks, laser and wire-guided missiles, and so on) have made it



too cheap and easy to kill those million-dollar tanks. Tanks will still have their uses: probably not as ultra-heavy, multi-gun monsters, but rather as fast, lightly-armored, cheap vehicles, used to exploit breakthroughs rather than create them. Which pretty well lets out the smart tank concept. A cyborg like Gottlos would be incredibly expensive, and could be knocked out by a single tactical nuke; a 200-meter Bolo Mark XXIII would cost even more – and, while it wouldn't fall to one nuke, it would be such a big target that it would go out long before it paid for itself. But I *still* wanted to do a smart-tank game. And I did. But it had to make some kind of sense . . . so half of *Ogre* is built around the need to explain why such units would ever be built.

Problem number one, of course, is those little laser-guided missiles. If a supertank is *ever* going to be practical, it has to be able to stand up to a lot of missile (and that means nuclear) fire. So the first postulate has to be an improvement in armor technology. I rejected a force screen, not because it wouldn't do the job if it existed, but because modern technology doesn't give us even a hint of when or if we'll get one. Too much like fantasy. On the other hand, we *can*, if we wish, assume that materials technology will continue to improve. We already have some incredibly tough two-phase materials. If an armor substance were to be developed such that a couple of feet could stop a tacnuke – and if that substance were light enough so that a vehicle could *carry* that couple of feet – tanks look better.

Even if the little nukes fired by opposing armor (and infantry) can be weathered, though, there is the possibility of a slightly bigger missile, fired from a couple of hundred kilometers off. We get around this by assuming (not too illogically) that jamming technology has improved. We can jam most long-wave signals now. I don't know how you'd jam a laser (except with smoke or window – unfeasible over large areas), but in a hundred years they may think of something. And satellites, which are such great spotters for missiles, are easy to knock down *today*. An unarmored satellite is a sitting duck for something as crude as a cloud of gravel fired into its path. A shielded one would be expensive to send up – and a little bitty nuke would ruin its electronic insides with even a not-so-near miss. So spy satellites may still be used – but they will have very short lifetimes and will be correspondingly restricted to times of maximum need.

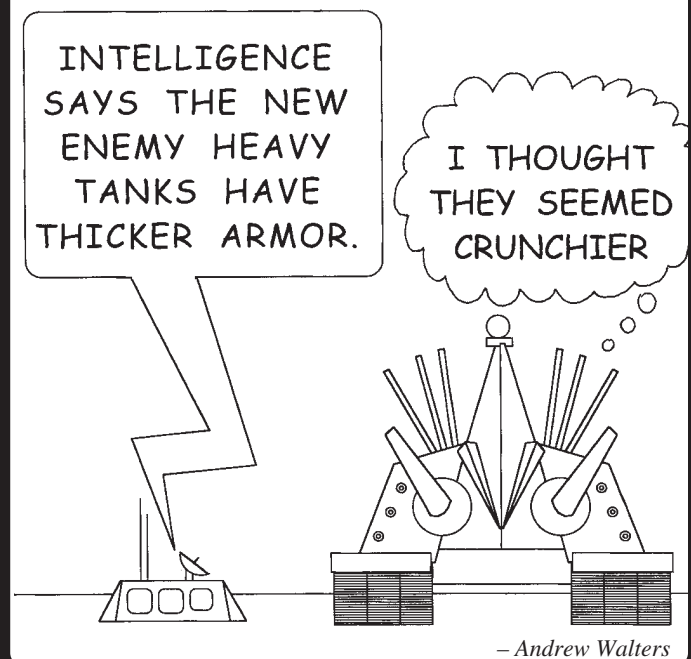
Another problem, not so much with the tanks as with the whole game, is the *big* nukes – either missile-delivered or airplane-dropped. If these are still effective, they would make a mockery of conventional warfare, by eliminating all large concentrations of units, and by smashing the objectives that a conventional force might otherwise be needed to take.

Again, though, we have a way out. While it's not absolutely certain that laser weapons will become practical, it seems like a good bet. But a laser that can spot and destroy a missile or airplane will be big, delicate, and

costly. So they will be used to protect rear areas – but forward units will have to rely on dispersion and jamming.

The net result would be a battlefield where tremendously sophisticated weapons systems would nearly cancel each other out. Target-seeking missile weapons would be countered by various jamming devices, and mass weapons would be too expensive to be used except on the most attractive and vulnerable concentrations.

So, given these assumptions, tank warfare might again become a cost-effective way to run a campaign. Having justified tanks, though, we still have the problem: *robot* tanks? A number of commentators don't believe we will ever see robot fighting units of any type. A recent article in *S & T* ("Invasion: America" in No. 57) mentioned the idea in a listing of possible "futuristic" weapons systems, and then dismissed it: "... no robot brain could fight as efficiently as a tank crew: again, people are cheaper . . ." With all due respect to the author of that generally good article: Hogwash.



– Andrew Walters

*Less than three minutes had passed. After the initial seconds of panic, the command post had settled down to business. Instead of master-minding an attack, it was fighting for its own life. Men spat orders into throat mikes, eyes on the big screen. The orange dot that was the Ogre was six kilometers closer, but green sparks were moving out to meet it – the men and machines of the 2033rd.*

*The general entered at a run. "Get me a picture!" he ordered. The screen flickered; moving dots gave way to an image. The huge machine ground over the landscape, incredibly fast for something so huge. Guns bristled. The tower on top rose 20 meters high.*

*"A Mark V," said the general. "They really want us, all right. Who had the watch?"*

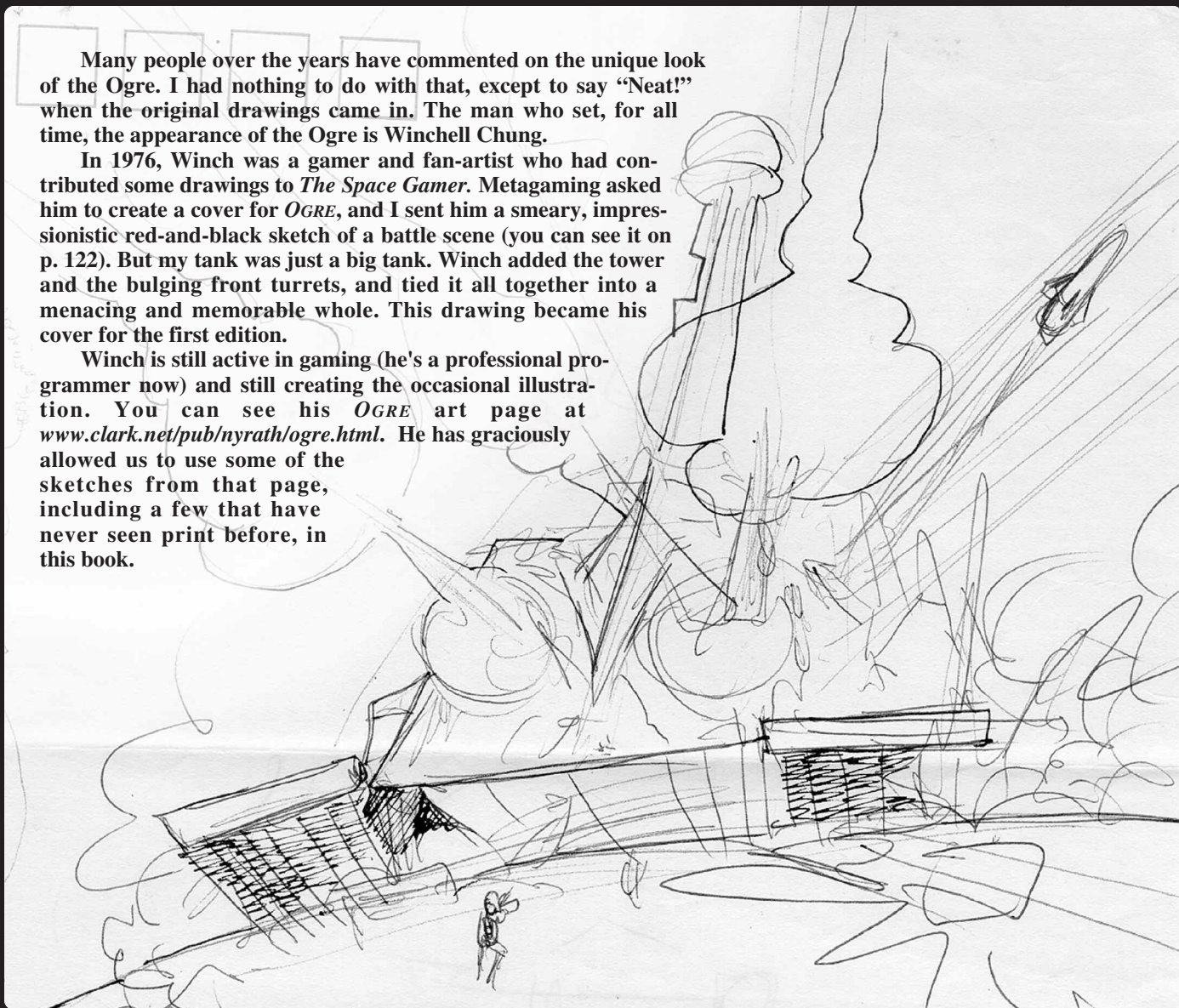
*"I . . . I did, sir."*

*"Where'd it come from?"*

Many people over the years have commented on the unique look of the Ogre. I had nothing to do with that, except to say “Neat!” when the original drawings came in. The man who set, for all time, the appearance of the Ogre is Winchell Chung.

In 1976, Winch was a gamer and fan-artist who had contributed some drawings to *The Space Gamer*. Metagaming asked him to create a cover for *OGRE*, and I sent him a smeary, impressionistic red-and-black sketch of a battle scene (you can see it on p. 122). But my tank was just a big tank. Winch added the tower and the bulging front turrets, and tied it all together into a menacing and memorable whole. This drawing became his cover for the first edition.

Winch is still active in gaming (he's a professional programmer now) and still creating the occasional illustration. You can see his *OGRE* art page at [www.clark.net/pub/nyrath/ogre.html](http://www.clark.net/pub/nyrath/ogre.html). He has graciously allowed us to use some of the sketches from that page, including a few that have never seen print before, in this book.



*“Sir, the river. I got a movement indication from the center of the river – I saw it come up. Nothing before that. I swear it, sir”*

*The general started to reply, then checked himself and stepped to the keyboard. The map reappeared (the orange dot was closer) and shrank. They saw their island from 50 – a hundred – kilometers in the air.*

*The general traced the river-course. “Here . . . and here. Yes, they could have done it.”*

*“Sir?”*

*“Underwater. It went into the ocean here. Through the delta – up the river and out. Very clever. I wonder . . . No, they just outfoxed us. As you were, son.”*

\*\*\*

Granted, present computer technology can't replace a man at anything requiring judgment. But that doesn't always have to be true. It is pure mysticism to suggest that the “miraculous” human brain will never be surpassed by electronic circuitry. I won't get into the argument of

whether machines can be self-aware, although I think of my Ogres as personalities. I *will* assert that we will someday be able to build a computer that is faster, “smarter,” and more competent, at least in non-creative occupations, than a human brain.

Sure, they'll be expensive. But expense isn't as important as cost-effectiveness. If a million-dollar robot brain can last ten times as long, given the same weapon system, as a man on whom \$100,000 was expended for training, the robot side is ahead by the cost of nine sets of weapons blown to scrap with the “cheaper” human operators.

\*\*\*

*The Ogre was 20 kilometers away. On the big map, a ring of green around it showed missile tanks ready to move in; more green dots, visibly moving, were GEVs harassing the enemy machine. As they watched, one GEV light went out. Another stopped moving and began to blink plaintively. The Ogre moved toward it.*

\*\*\*



The other nice thing about computers is that they can do a lot of things at once. I suspect that part of the reason tanks, unlike battleships, never evolved multiple-gun versions is that a crew of men in the cramped, uncomfortable interior of a tank has a great deal of difficulty using even *one* gun well. A robot unit, on the other hand, could handle as many weapons as it was given, with perfect coordination.

Which leads to an interesting conclusion. Everything else being equal, a robot tank might be *expected* to carry as much armor and weaponry as it could. That computer is an expensive investment, and needs to be protected; furthermore, the computer can handle more weaponry, so every gun you give it augments its strength *effectively*.

\*\*\*

*Twelve minutes since the shooting had started. The Ogre was 15 kilometers away. Faced by eight missile tanks, it had slipped to the side; three of the tanks were gone, and two others had never gotten in range. But the Ogre had paid; it was moving slowly now. On the big map, three more green dots moved toward it. The heavies were going in.*

*"Mercier to CP. I've spotted it."*

*The general punched for an image. There it was. Four of the six missile tubes were empty; two of the "small" guns along one side were scrap. Loose tread flapped; damaged motors sparked. Its guns moved and flashed. Then the screen dimmed as a nuclear warhead hit the Ogre. The image returned. There was a new crater along one of the armored sides – nothing more.*

*"Get those guns, Commander." The general's voice was calm; Mercier's reply was equally mild. "Trying, sir. It ducks." Then jubilation. "Good shot, Fair! You got it. Hit the misbegotten pile of junk." The big screen was completely dark. It came on again, from a different angle. The Ogre was hurt. One of those big front guns was gone – completely. The other was clearly wrecked.*

*"Good man, Mercier! Who did that? Commander Fair? . . . Mercier? . . . Fair? . . ."*

*"This is Kowalski in 319. It got Fair about three times. I can't find Mercier."*

*On the screen, one heavy tank faced the Ogre. Two GEVs swept in and out. Missile tanks and infantry moved closer – too slowly.*

*"Here it comes." Kowalski – commander of the last heavy. "You'll have to shoot better than that, you gadget. GOTCHA! Took out its . . ."*

*Static. Then a new voice. It sounded quite human. And amused.*

*"Gotcha."*

\*\*\*

Enough. I managed to convince myself that, yes, under certain circumstances, the robotic tank would be a workable weapons system. The next question was: What kind of robot tank?

I rejected the cyborg approach of *Gottlos* and *Cemetery World*, not because I doubt it'll work (I think it would), but because (a) it still leaves a human brain at the controls, and I want something better, and (b) I don't like the idea.

Keith Laumer's *Bolo* stories hit closer to the mark for me, in that he was making the same basic assumption: big, invulnerable, intelligent supertanks. But his Bolos are just too darn *big*.

Admittedly, we won't know until we try. But fooling around with models and sketches and thinking about the cube-square law. I get the idea that the dinosaurian Bolos would have the same trouble that the dinosaurs did. Unnecessary bulk. Consider: an ordinary main battle tank today is maybe 12 meters long. Double that and you increase the bulk *eight* times. Not only is that *already* pretty expensive, but it's already big enough to do the job. Sketch a tank – top view. Now draw a tank body twice as long, twice as wide. See how many tank guns you can give it without crowding . . .

The practical limit to the size of one of these land cruisers would be that at which it became worthwhile for an enemy to use a strategic nuke on it. Or, alternatively, the size at which you couldn't afford enough of the things to cover all the places you needed to cover. A navy with nothing but battleships would be a poor excuse for a navy, although I wouldn't want to be the first one it got mad at. So I figured a size of 50 meters or less. That should be amply sufficient to create a monster.

\*\*\*

*The Ogre rolled on. It was within howitzer range now, and the big missile cannon were scoring on it. Its missiles were gone, but it still had guns. The infantry had met it – finally – but powered armor notwithstanding, they were dying as fast as they came in.*

*"It's committed," said a big major, his eyes on the screen. "It can't afford to stop now." The general nodded. "Get behind it," he said into his mike. "It's after the howitzers. They're killing it."*

*In the flame-lit darkness, men heard the scrambled transmission. Men, and one other: The Ogre took in the surrounding terrain, considered the location of the command post and the howitzers, watched the movement of its enemies, weighed the order it had decoded. **Behind**, it thought. **They have made a mistake.***

\*\*\*

All in all, a supertank with a cybernetic brain would be a formidable weapon. Since it would need no crew, its interior could be almost solid. What wasn't power plant or weaponry would be armor. It would be fast, hard to kill, and frightening. In the battle line, it would be a menace: if it could pursue hit-and-run tactics, it could tie up many times its own strength.

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It was very close now. Had the command post had windows, the men inside could have seen the explosions. The Ogre was moving very slowly now, but two guns still spoke. It no longer dodged; it was a juggernaut, coming straight for its target.

Inside, the general's face was gray. He spoke to no one in particular. "Smart. That thing is smart." A scream still echoed in the big room – the dying scream of the last missile tank commander. Out of the Ogre's path, safe behind a three-meter ravine, lashing out at the metal giant – and the thing had changed course, ignoring the howitzers, walking over the gully like it wasn't there, crushing the smaller tank. Two GEVs had died a second later; their speed was their best defense, and the Ogre had outguessed them. The side trip had given the howitzers a few more minutes; then they, too, had died.

The screen showed the Ogre grinding on – a shambling monster, barely able to move. "The treads. . . hit the treads," whispered the general. "Stop that thing." The



"Boy, after that pair of giants and nest of gargoyles, this should be a real pushover . . ."

image changed, and he saw what was left of his force: three GEVs and a handful of infantry.

The Ogre rolled on . . .

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Why name it **Ogre**? It seemed appropriate. Ogres – the "real" ones – were big, violent, and gruesome – and some of them were pretty smart.

When someone whispers, "Here comes the Ogre," you can feel the hair rising on the back of your neck . . .

The Ogre, as we worked it out for this game, exists in two varieties – the monstrous Mark V and the slightly less fearsome Mark III. The Mark V carries two big guns, six smaller ones, lots



of antipersonnel, and a half-dozen missiles. It is around 40 meters long, and moves (in this game) at 45 kph; it's probably faster on good ground. A Mark III is just as fast, but has less punch. We're working on specs for the Marks I, II, IV, and VI(!). These may show up in *TSG*, or in a future game.

And, with luck, there *will* be other **Ogre** games. This one seems to play well; I'd like to do another game, working in all the different types of Ogres, and maybe yet another, compatible but separate, exploring the powered-armor concept.

Of course, **Ogre** was designed, from the ground up, to fit the small-game format. The original idea was to "think small." Something that could be played on a legal-sized map, with a total supply of 50-100 counters, that could be learned in an hour or so and would take about the same time to play. Now, as I said in the beginning, I've been wanting to do a game with "smart tanks." But I hadn't come up with a way to make it anything but a dressed-up **Battle of the Bulge**. Tanks are tanks. I needed a new wrinkle.

The *limitations* of the small format provided that wrinkle. Thinking about writing a scenario using maybe 30 counters and just a few hexes, it hit me: give one side *one* counter. One *big* counter. After that, it started to fall into place.

And it plays – that's the nice thing about it. It actually works. Some people prefer running the defense: "I like to kill Ogres," as one playtester who shall remain nameless remarks. Personally, I like being the Ogre. Either way, though, a player has to make some tough decisions. As the Ogre, you're running in against a superior force that can swamp you with sheer numbers if you're not careful. As the defense, you have to stop a unit that (at least in the beginning) eats your tanks like popcorn and doesn't have to worry about getting back alive.

That pretty well ends these notes. It doesn't end the **Ogre** story; I hope that's just starting. It doesn't end the story of the Ogre and the general, either. You'll have to settle that one for yourself. The results aren't in yet . . .

This article, from *Space Gamer* 10, was a fine analysis of the role of armor at the time it was written . . . in 1977. Now, of course, chess computers are beating masters easily and drawing ahead of the grandmasters, and modern networking technology can tie a whole armor com-

pany together into a single unit that is far more than the sum of its parts. Read this, and then compare it with the next article, David Pulver's analysis of the mechanized battlefield of 2000.

# TANK — PRESENT, FUTURE, OGRE

by Charles R. Bowles

The tank is a viable weapons system now, and will remain so into the indefinite future.

Many sources have recently opined that the tank may be on the way out due to anti-tank technology. Even the designers of simulations about future tank warfare occasionally sound almost apologetic about thinking of tank combat in the future. ["Notes on the Ogre" by Steve Jackson, *TSG* 9: "Present anti-tank technology (air attacks, laser- and wire-guided missiles, and so on) have made it too cheap and easy to kill those million-dollar tanks."]

The most recent test of the viability of armor was the Arab-Israeli Yom Kippur War. Many consider the Israelis the finest tankers in the world both from a theoretical and a practical point of view, and when the major portion of their early heavy losses in tanks were from the Soviet Sagger infantry anti-tank missile, it seemed the day of the tank might be drawing to a close. However, the Israelis knew that committing the tanks without infantry was poor operational doctrine. The army was not mobilized yet and only a few armored reserves were available to throw into the breach. Later, when sufficient infantry was available, the Israelis went back to a proper operational doctrine of mixed infantry and armor, and achieved very impressive success with acceptable losses. The Israelis, least of all, believe the day of the tank is over. During the fighting, the U.S. tried to replace part of the Israeli losses, as the Soviets did for the Arabs. Both Arabs and Israelis placed high priority on tank replacements.

Any advantage an anti-tank system gains over tanks is to a large extent transitory, lasting only until tank design or operational theory can be changed. Since fin-stabilized

shaped charge rounds have become the major ammunition used by Soviet tanks, NATO tanks are being designed with spaced armor plate or composite armor plate, both of which are more effective in stopping penetration by shaped charge rounds. The Israelis now believe they have an operational doctrine which will allow them to defeat the Sagger missile even without friendly infantry support. One overwatch tank fire team observes while the other tank team moves. If a Sagger is fired, the overwatch team will fire at the Sagger launch point and warn the target unit of the direction the Sagger is coming from. The moving tanks will rotate and discharge their guns in the Sagger's general direction. All guns discharge Beehive rounds which release a high-velocity cloud of thousands of dart-shaped projectiles about the size of finishing nails, called flechettes. The Sagger is a relatively slow missile

which must be delicately guided to the target by a man observing both the target and the missile from the launch point. The missile must be in flight for a minimum of four seconds, and for best results, six to eight seconds, in order to allow the guidance man to gently stabilize and properly aim it. The Israelis believe that long before the missile can reach target, they can cover both launch point guidance man and missile with clouds of high-velocity flechettes. Even if they fail to hit the missile or guidance man (the odds favor a hit on one or the other), the impact of thousands of flechettes all around the guidance man is certain to cause him to flinch at the critical moment of guidance.



A similar operational defense doctrine against missiles using the Beehive round is used by almost all NATO tanks. All first generation infantry anti-tank missiles can be countered by this method. However, the Beehive round would be less effective against second- and third-generation infantry anti-tank missiles like those now being deployed by NATO because of their improved guidance and higher speed.

For future missiles a quicker system will be needed – perhaps 20 or 30 mini-mortar tubes or claymore mines firing Beehive type rounds spaced around the turret and a heat-seeking or mini-radar unit on top. Any fast-moving object coming within 50 meters would automatically trigger a blast of high-velocity flechettes into the path of the missile. Remember that the thousands of flechettes in each round are too small to damage nearby friendly tanks and every missile approaching a tank formation will take Beehive rounds from several tanks. Whatever form the defensive system may take, as missile technology advances, so does anti-missile.

## NUKES AND TANKS

It has been proposed that small nuclear warheads will spell the end of the tank in the future, but nukes are the reason tanks will have to be a major weapon on the battlefields of the future. Tactical nuclear doctrine of the present calls for a small nuke to blow a hole in the line and the attack force to roll over ground zero as soon as possible to exploit the breakthrough. For troops walking, this would not be safe for one to one and a half days. A jeep screens out about 20% of the residual radiation; an Armored Personnel Carrier (APC), about 40%; and a medium tank, about 90%.

The key to creating and sustaining a successful breakthrough is the concentration of force. You must outnumber the defending troops at least two to one. This concentration creates an opportune target and as a result, the breakthrough area is likely to receive a nuke from the enemy as well.

This situation is further complicated by modern communications and artillery techniques. During the Vietnam

fighting, a 155mm artillery battery could send off the first round against a target of opportunity within 200 seconds of receiving the target coordinates by radio. With new targeting computers, the U.S. 155mm artillery units in Europe can send off the first round against a target of opportunity 55 seconds after receiving target coordinates. The response time for a good 155mm self-propelled howitzer battery firing an immediate suppression mission against a priority target is only 18 seconds.

Any concentration of strength must be capable of rapid movement to survive. With a one-kiloton nuke detonation, infantry in the open are vulnerable out to 1,400 meters, but tank crewmen are vulnerable only at 300 meters or less. Infantry may be able to defend dug in, but they cannot concentrate in the open for an attack and expect to survive. Hovercraft and space suits powered for flight may be able to maneuver the infantry around the battlefield, but any hit in the general area with moderate-sized nukes will eliminate them. Men need the mobility and heavy armor of a tank or APC to survive the heat, blast, and radiation of nuclear battle.

While it is true that a direct hit with a nuke warhead would destroy any tank yet conceived, this is also true of most antitank warheads fired at tanks today. The limiting factor on anti-tank warheads normally is not the effectiveness of the warhead, but the difficulties in getting the warhead to the target. The missile or aircraft delivering the warhead can be jammed, shot down, etc., and if you are firing it from a gun, you will have to have something about the size of a tank to carry it anyway. It may be possible very soon to build laser-triggered nukes small enough to be fired by very small weapons, perhaps rifles or machine-guns. Although these super-small nukes would create great dangers for tanks, they would also give the tank its greatest defensive weapon. A radar-controlled nuke-firing machine gun with proximity-fused rounds would provide excellent defense against low-flying aircraft and missiles, and any terrain likely to contain enemy infantry could be sprayed with a quick burst of nukes. The development of the small-caliber nuke would not mean the end of the tank, but might mean the end of the close support attack aircraft and helicopter.

Current research on high-energy laser weapons centers around the rocket-pumped laser. The rocket exhaust supplies both the energy and cooling for the laser. If this laser system develops as expected, it could provide an effective tank weapon. The weapon would be heavy, but the 120mm high velocity gun and shock-absorbing mounting on tanks today are in the weight area of two tons already. Will the laser become the tank's major weapon? Quite possibly, but only time will tell.

## ARTIFICIAL INTELLIGENCE

The question of the use of advanced computers (cybernetic brains) to replace crews is not so much *if* it will occur as *when*. The replacement of crewmen by computer will probably not be a sudden dramatic event which

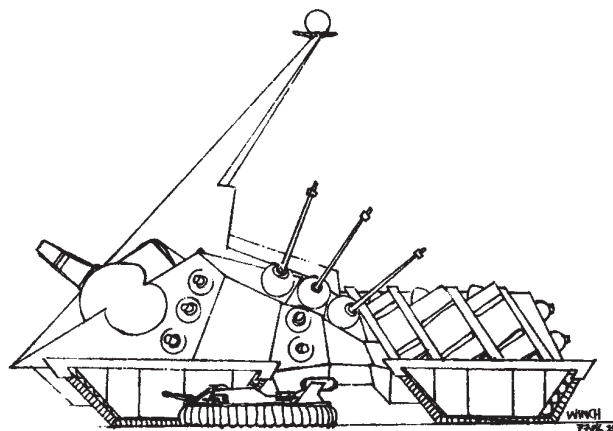


brings about a national debate over the moral, social, and psychological ramifications of a computerized terror monster killing people. The number of crewmen will be gradually reduced until only one man controls the tank, and as time goes on, his duties will become fewer until he becomes more of a burden on the system than a benefit.

The Air Force/Navy joint project cruise missile, which has already undergone several very successful test flights, uses a TERRain and COntour Matching guidance system (TERCOM) which allows the missile to fly a few hundred feet above the ground through valleys, over mountain ranges, following a pre-selected course for over 2,000 miles, and then recognize the target by radar appearance, and plant its nuclear warhead within 30 meters of intended ground zero. The system does this by a combination of inertial guidance and comparison of radar scans of the terrain around it with its internal record of the expected terrain. The system finds its way 2,000 miles and then recognizes its target. What more would a cybernetic tank need for guidance?

The separation of functioning units into friendly and enemy objects would not be difficult. Since WWII all combat aircraft have carried Identification Friend or Foe (IFF). When an aircraft comes into radar range, an electrical unit within the radar system automatically asks the aircraft by radio signal to identify. If the correct automatic coded radio response is not received, the radar blip is automatically designated by the radar computer as Foe and, if anti-aircraft missiles are available, it is probably fired on. These IFF radio responder units can be made very small and are light in weight. Even those capable of complex coded responses could easily be carried by individual soldiers and changed in their coded response every few days.

### Very early concept art for the Mark III and GEV, from Winchell Chung.



In short, the cybernetic tank would shoot up any warm object (body heat or engine heat or visual recognition) which did not give the correct friendly response. Some type of IFF system may be on tanks and with infantry long before the cybernetic tank. It is presently too easy to mistakenly engage friendly units, particularly at night.

With terrain matching guidance, Identification Friend or Foe, and target recognition systems already existent, only the decision-making limits of the computer and the cost prevent the deployment of cybernetic tanks. A few years back a computer could not beat a chess master more often than it lost, but in the last couple of years, the computer has had good luck against masters. This is exactly the type of logic it will take for the tank's computer brain to make the proper decisions about when to fight and when to run, when to head for cover and when to stop and shoot, when to take an enemy unit head on and when to try to maneuver for a flank shot.

From the cost point of view, computers of all types are dropping in cost and increasing in capabilities. We are still in the infancy of micro-circuitry and logic circuitry. For the foreseeable future the cost of all military hardware including tanks will go up and the cost of computers will drop. There will come a time when the moderate cost of a computer brain for a tank will be far outweighed by its ability to increase survival probabilities on the very expensive tank.

The first and foremost advantage of the cybernetic tank is the speed of reaction and thought. A cybernetic brain would be able, for instance, to receive and confirm information from video, radar, and infrared sensors on an incoming anti-tank missile, decide whether to out-manuever or fire at the missile, and launch the appropriate actions simultaneously in far less than one second. Although lacking in what is commonly known as cunning and unpredictability, the cybernetic tank would make errorless lightning decisions far beyond the capability of the finest human crew. This speed and accuracy would extend to every aspect of tank performance.



All other advantages stem from the fact that no human (or other intelligent life forms) are within the tank. No worry about crew morale or discipline, the unit can choose to expend itself without problems if needed. No worry about food, water, or rest for the crew. The tank can be mothballed indefinitely and still be ready for combat without the need for training or mobilization of reserve crews. Since there is no need for the large crew space within the tank, the cybernetic tank could have a far lower, compact, and therefore harder-to-hit silhouette. Without a crew the cybernetic tank could be designed to withstand far more in the way of vibration, shock, heat, blast, and radiation. With shielded electronics which are hardened against radiation, the tank could operate far closer to nuclear blasts than one with a human crew. It would be able to roll over ground zero while the radioactive cloud was still boiling upward. This is also true for nukes fired by the tank. The tank could fire a nuke and then roll into or through the radioactive dust cloud and hide from laser beam-guided missiles and heat-seeking missiles.

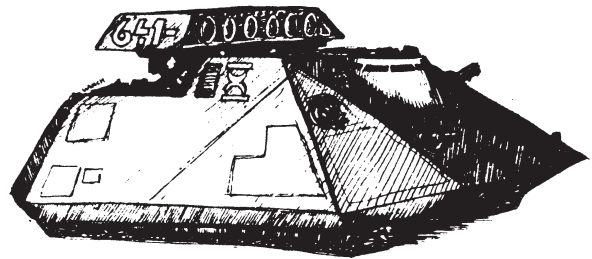
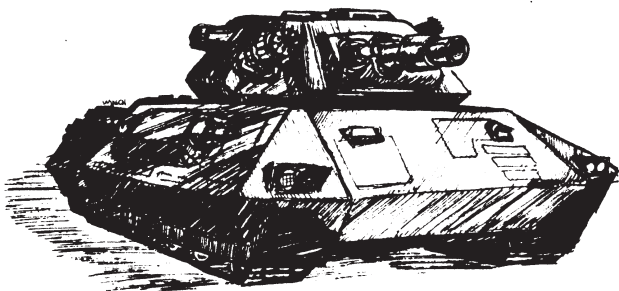
The cybernetic brain of the tank would be located at the exact center of the tank hull within a lead box. This shielding would allow the small but complex computer to survive tremendous radiation levels. (Strong radiation can affect transistor semiconductor materials, etc.) From the brain, circuits would control every device on the tank. Nuke-firing guns would be the primary weapons of the tank. The cybernetic brain would gather target information, make decisions, aim and fire weapons so quickly that the projectile time of flight to target would become the critical time factor, and a high-velocity gun projectile is much faster than the missile. Nuke warhead missiles would be used for close-in defense against infantry and air attack. The entire tank would be designed to withstand a terrific blast effect and even tremendous heat for moderate periods of time. The engine would be a small nuclear power plant which transfers excess and waste heat to the hull of the tank. It can operate without oxygen in a super-hot mushroom cloud or under water.

## CYBERTANK DOCTRINE

Tanks normally operate with friendly infantry, but the cybernetic tank would operate most of the time independently due to its unique characteristics and capabilities. The description of the basic *Ogre* game is one Ogre tank against defending infantry and armor. This scenario would accurately represent one of the key uses of the cybernetic tank. Seconds after a tactical nuke has blown a hole in the enemy line, an Ogre would be sent through the still-rising mushroom cloud to destroy, disrupt, and disorganize the enemy units immediately behind the front line. The Ogre would prevent the enemy from organizing an adequate defense of that sector of the line until friendly manned units could arrive, and then it would press hard into the enemy rear area well ahead of friendly manned units.

One interesting theoretical modification of the Ogre would be the Logre, or Light Ogre. The cross-country performance of today's tanks is limited more by the relatively slow driver reflexes and the ability of the crew to withstand kidney-jarring shocks and vibration than any other factors. With the almost instantaneous reflexes of the cybernetic brain and its ability to withstand shock and vibration, it would be possible to build a lightly armored and lightly armed (small nukes are still potent) tank capable of extremely high cross-country speed. It would move at speeds between 50 and 80 mph across the roughest terrain using every rock, ravine, ridge, clump of bushes, and radioactive mushroom cloud as cover. It would not try to fight front line units, but slip by them and then raise havoc far and wide in rear areas until it was caught. With its speed and ability to fire on the run, it would not take long to do a great deal of damage. It would also be the ideal guerrilla warfare unit. It could hide by day and strike by night.

If I find fault with *Ogre*, it is not with the basic concept of the game or with the basic scenario, but with the date of 2085. The Ogre is certain to come to the battlefield, and it will be here before 2020.



Alternate designs for *Ogre*-universe vehicles. Left: A more conventional Heavy Tank. Right: A Missile Tank utilizing a pop-up turret that would fire more and smaller missiles than the Paneuropean unit depicted in the original game.

**T**hat last article was solid when it was written, and it still is. But it's two decades old. I needed a companion piece looking at the modern battlefield. David Pulver (author of both *GURPS Vehicles* and *GURPS Mecha*, and

an aficionado of both current and future armored vehicles) offers this look at the battlefields of the next few decades, as seen from the viewpoint of 2000.

# TOMORROW'S TANKS TODAY

By David L. Pulver

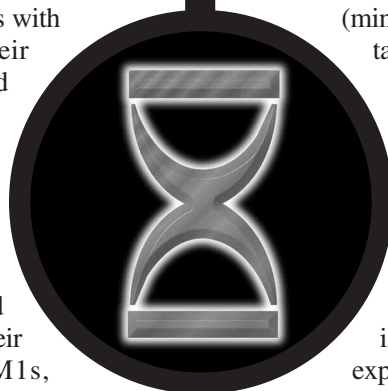
The Gulf War confirmed the validity of mechanized warfare. Weeks of aerial assault by the full might of Western air power decimated Iraqi forces, but could not force Saddam Hussein to surrender. Then came Desert Sabre. Spearheaded by the U.S. Army's M1 Abrams and the British Army's Challenger main battle tanks, the coalition's mechanized armies crushed the Republican Guard in 100 hours. The only question was whether or not they should have kept on going.

The lesson was lost on no one. Nations with potentially hostile neighbors opened their pocketbooks. India and Pakistan ordered hundreds of new T-84 and T-80 tanks from Ukraine and Russia, with the improved armor, ammunition, night vision gear and reactive armor Iraq's obsolete tanks lacked. Egypt built its own production line to turn out a licensed copy of the M1 Abrams. Countries like Jordan, Greece and the United Arab Emirates are replacing their older tanks with Chobham-armored M1s, Challengers and Leclercs. Nations that cannot afford new tanks are upgrading their old ones, often fitting Western electronics and guns into outdated Russian hulls.

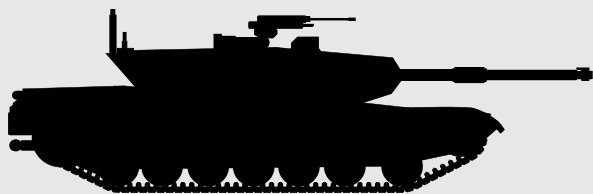
So what's a state-of-the-art tank like? The present generation of Western main battle tank (MBT) is typified by the newest variants of the M1 Abrams, Challenger 2, German Leopard 2 and French Leclerc. They are 60-ton tracked behemoths whose 1,000-1,500 horsepower engines nevertheless propel them at speeds up to 50 mph across country, making them as agile as earlier light tanks. They carry a crew of four: a driver seated in the hull, and a gunner, commander and loader in the large, spacious turret. (The Leclerc replaces the loader with an automatic loader, common practice in Russian tanks, and likely to continue as armies seek manpower savings.)

The tank's body is a tough steel frame over which is layered special "Chobham" armor, a composite of steel, ceramic, and epoxy lighter and tougher than steel, and designed to provide special protection against the explosive shaped-charge warheads used by anti-tank rocket and missile launchers. The armor is thickest on the hull and turret fronts, equal to 2-3 feet of steel plate (as much as a WWII battleship!). It is thinner elsewhere, making it vulnerable to attacks from the side, rear, top or bottom (mines). The armor amounts to two-thirds of the tank's total weight. Backing up the armor are other survivability features, such as automatic fire suppression equipment that can flood the tank with inert gas in microseconds, and special bins for storing explosive ammunition so that should enemy fire cause them to explode, the blast will be vectored harmlessly out of the tank. These two measures have greatly increased crew survivability – fires and explosions have always been the biggest killers of tank crews.

The tank is armed with a 120mm cannon firing hyper-velocity sabot shells. These break open in flight to release finned darts made of super-hard tungsten (depleted uranium was originally used, but is being replaced due to environmental fears). A tank carries a mix of 30-50 sabot shells for killing enemy armor and explosive shells for softer targets. The cannon is fully stabilized for firing on the move, and uses a laser rangefinder and ballistic computer to achieve 90% hit rates at up to three miles. Its shells can punch through up to two feet of armor – which means they can reliably destroy anything on the battlefield, except another state-of-the-art tank. To kill a modern Western MBT requires either a close-range shot or a hit from the flank or rear . . . or from above.







**M1 ABRAMS — 1980**

Recently, a new range of guided shells and proximity-fused shells have been developed for the 120mm tank gun. They overfly the enemy vehicle and then detonate, producing a self-forging projectile that drives through the weak top armor. Other models include smart proximity-fused explosive shells that are especially effective against enemy helicopters. These new shells have so far been considered too expensive to put into mass production, since most adversaries are using tanks less well armored than the latest Western designs.

Whereas pre-WWII tanks counted themselves lucky if they had a radio, the modern tank is packed with electronics. It carries a thermal imaging system that uses infrared to see in the dark, often mounted in a tiny cupola that the commander can use to spot targets. More recent designs feature “hunter-killer” sights that allow the tank commander to “mark” targets for the gunner to engage. One of the most important devices on the tank is the Global Positioning System (or inertial guidance system in some units). These use information from satellites or gyros to show the tank’s exact position, and were a key to the U.S. Army’s victories in the Gulf War, allowing coalition units to navigate across trackless desert and strike where the enemy least expected. GPS was so successful that it is being integrated at all levels – even infantry soldiers will have helmet-mounted GPS soon.

However, there is more to the newest tanks than simply adding gadgets – it is how these gadgets are linked together. Combat vehicles (not just tanks) built since the Gulf War, such as the M1A2 variant of the Abrams, have undergone digital makeovers. The old analog instruments and electronics are replaced with newer, more reliable digital systems, all tied together by an integrated onboard databus. This makes the tank much easier to maintain and operate; whenever a system breaks down, the digital control panel will indicate what is out of action. (In the future, the tank may even contact the supply base on its own to order a spare part!) More importantly, the driver, gunner and commander each gets his own customized display terminal.

Connected to the tank’s secure radio, this allows sharing real-time digital imagery such as map graphics, text communication and satellite data. This applies both between crew in the vehicle (a tank commander forwards a digital route map to his driver) and externally (so a scout vehicle could send a map marked with enemy locations to

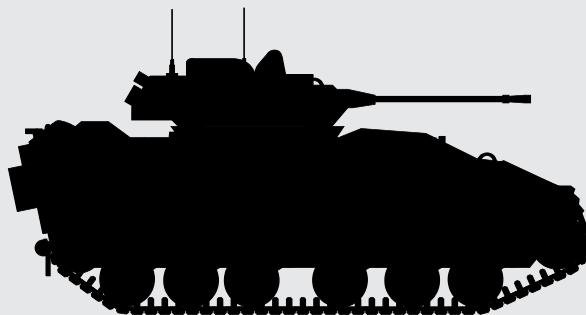
a tank commander). Known as IVIS (InterVehicular Information System) in the U.S. Army, it should make battlefield command and control far easier and faster, acting as a potent force-multiplier. In the next few years even infantry will be wired up. The mechanized battalion is deadlier than ever before.

## TANK KILLERS

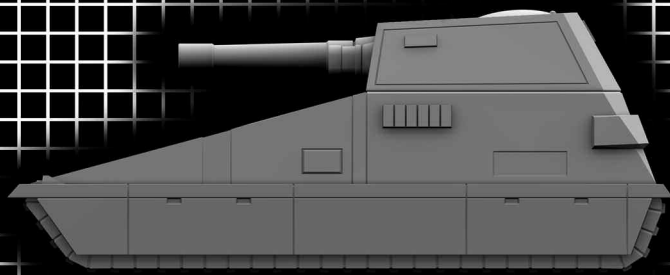
What can stop the tank? The biggest threat to the tank may not be an enemy, but a lack of one. The Cold War is over. Until another superpower showdown materializes, with hostile powers staring at each other over land borders, the main missions for Western armies are likely to be peacekeeping and small war operations, often in cities. Does this mean the tank is a dinosaur, and we should replace it with light infantry? Not at all. In peacekeeping operations, tanks are vital for making lightly-armed guerrillas or warring factions think twice about attacking convoys or patrols. Armor is also a vital element in city fighting, allowing troops to advance without becoming bogged down . . . although it must operate as part of a combined arms team. Tanks on their own are ambushed and destroyed, as the Russians relearned a few years ago when they sent unescorted armor into Grozny. When U.S. Rangers got into trouble in Mogadishu, the thing they needed most was not gunships or fighting spirit. It was tanks. They didn’t arrive in time, and a lot of Rangers paid the price.

A greater threat may be the anti-tank guided missile (ATGM). The tactics described in *Tank: Present, Future, Ogre* are still a good way to defeat most last-generation operator-guided systems. Keep a careful overwatch for the enemy (made easier by systems like thermal imaging and IVIS) and pump a high explosive or beehive shell onto the ATGM gunner’s position to spoil his aim before his missile can hit.

However, a new generation of brilliant and non-line of sight ATGMs is coming into service. An example is the U.S. Army’s man-portable Javelin and the upcoming EFOG fiber-optic guided missile. These missiles do not require the gunner to continuously track the target. The missile is locked onto the tank’s image (often using an



**M2 BRADLEY — 1983**



**PANEUROPEAN "JAEGER" HEAVY TANK – 2060**

infrared imaging system) and fired, tracking it with no further input. Shooting the gunner won't do any good – in fact, he probably dived for cover right after he launched. The new brilliant missiles are often capable of maneuvering to attack the top of a tank, making all that heavy armor useless. Even nastier are brilliant artillery shells such as the proposed BAT system, which can be fired from miles behind the battlefield. Brilliant homing mortar shells are on the horizon – prototypes already exist, stalled only due to lack of funds. Just as with portable anti-aircraft missiles, though the West will have the new devices first, ever cheaper and better micro-electronics will start putting brilliant ATGMs in everyone's hands by 2010.

Even scarier (from the tanker's perspective) is a new generation of heavy supersonic ATGMs called kinetic kill weapons, such as LOSAT. These missiles are too heavy for infantry to carry, but they could easily be mounted on a light armored vehicle like a Bradley or BMP, or carried by a jeep. LOSAT and its ilk are like huge main gun rounds – LOSAT weighs 177 pounds– so fast and hard-hitting they can punch right through the heaviest frontal armor. The tanker won't have time to bring fire down on the missile gunner. If he's lucky, he'll have time to scream. Some theorists have even advocated dumping the MBT and replacing it with light tanks or armored cars armed with LOSAT and 30mm cannon.

Weapons like BAT, LOSAT and Javelin are certainly deadly, but they need not render tanks extinct. Tank designers can take comfort in the experience of warships a generation before. Faced with supersonic sea-skimming missiles like Exocet and Harpoon, warships defended themselves with ECM and point-defense weapons.

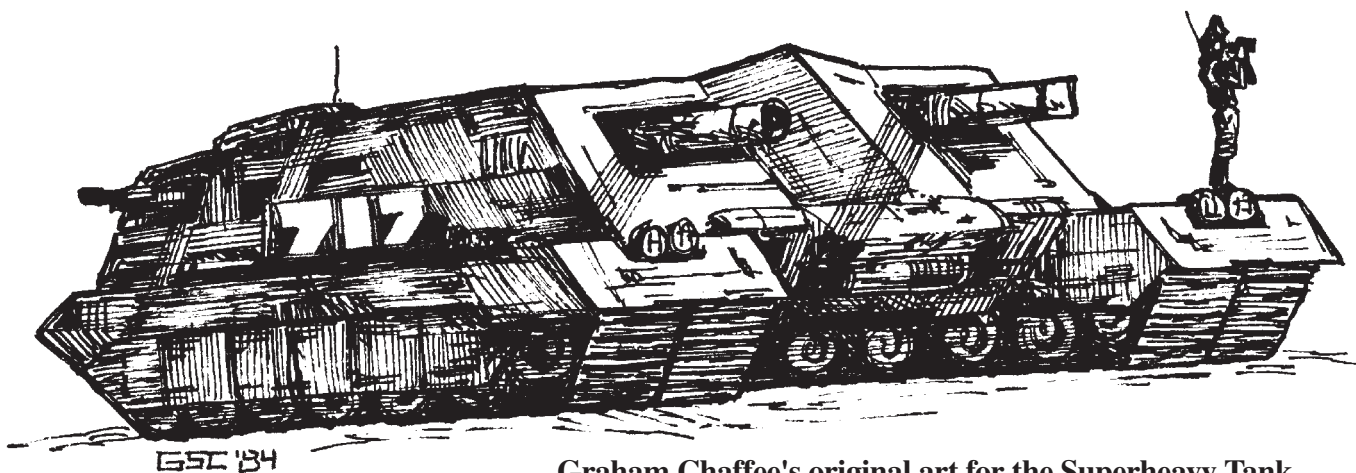
The Russians, who cannot afford the heavier Western tanks with their Chobham armor but whose AFVs are often the target of Western missiles, have led the way in this field, with two innovative systems that can be retrofitted to existing tanks. The TShU-1-7 Shtora-1 optronic countermeasures system (fitted to some T90 tanks) comprises a laser-warning receiver capable of automatically deploying smoke to jam laser-guided missiles or rangefinders and an infrared jammer that uses coded pulses of infrared radiation to confuse the control systems of anti-tank guided missiles such as TOW. (These missiles are not infrared homing, but the command unit uses IR to track the missile, and so can be fooled). The second system is Arena, which is a

short-ranged radar linked to explosive charges whose blast and fragments swat incoming missiles out of the air. Each system is only 50-70% effective, but the two can be used in combination. So far, neither system has been adopted by any Western tank design, but General Dynamics Land Systems (which makes the M1 Abrams) has been rumored to be interested in Shtora-1.

Neither system would be entirely effective against LOSAT, however. Future tank designers may need to emulate warships and mount radar-directed Gatling guns and high-speed anti-missiles. A Gatling cannon uses too much ammunition for a tank to carry, but in the more distant future, a small cupola above the main turret may mount a chemical-pumped laser or a rapid-traverse railgun turret. In the meantime, it looks like tanks will be equipped with their own anti-missiles. Boeing is already hard at work on this very concept, developing a system called the Small Low-cost Interceptor Device (SLID). The SLID consists of a radar dome that will fit on top of the tank to detect incoming attack, and a garbage-can sized missile launcher on the rear of the tank. The actual SLID missile is small but fast, and should be very effective against subsonic missiles and reasonably so against supersonic attackers. It is designed to be retrofitted to existing vehicles, and will allow the tank to engage both air and ground-launched ATGM. Future upgrades may include a longer-ranged version allowing the tank to shoot down aircraft. If SLID becomes common, the next generation of tanks may make attack helicopters obsolete, rather than the other way around.

## TOMORROW'S TANKS

So what does the next generation tank look like? In 1997, the U.S. Army and the Defense Advanced Research Projects Agency (DARPA) began work on a project called Future Combat System (FCS) to answer just that question. Their goal was a tank two-thirds the weight of an Abrams (to reduce the strain on transport systems when deploying overseas), yet more survivable against current threats. Since most of a tank's weight is armor, this meant new armor technologies, some of which may point the way to super-armor like BPC. The FCS program is investigating various refinements of existing armor materials. More exotic composite materials (possibly including carbon nanotubes, if the bugs were ironed out) might also be used.



Graham Chaffee's original art for the Superheavy Tank.

Another way to lighten hulls might be to replace metal with composites. The first AFV prototype with a completely non-metal hull, the UK's Advanced Composite Armored Vehicle Platform (ACAVP) prototype, was completed in 2000. Its glass-reinforced plastic hull both saved weight and improved stealth characteristics. However, even more weight would be saved by so-called "smart armor."

"Smart armor" encompasses electric and electromagnetic armor, both of which would be used with traditional armor. Electric armor relies on a new family of shape-memory metals, which change form when an electric current is applied. Sensors in the armor would detect a collision and a pulsed electrical power generator would fire, heating the armor and causing it to alter its shape or material qualities, briefly augmenting its effective thickness at the point of collision. Another technology is electromagnetic armor. A reusable cousin to the reactive armor blocks used on Russian and Israeli tanks, EM armor is designed to offer additional protection from shaped-charge warheads without the risk to friendly infantry posed when reactive armor detonates. Micro-electromechanical sensors in EM armor detect the penetrating jet of a shaped charge. An intense electrical discharge is initiated between electrically conductive plates in the armor, creating a powerful magnetic field which disrupts the charged particles of the explosion's jet.

The tank's basic design would use a conventional tracked hull, but the large manned turret of existing MBTs would be replaced with a smaller unmanned turret. The crew would rely entirely on next-generation visual and thermal sensors for their outside view. Atop the main turret would likely be a smaller unmanned cupola mounting a point defense radar (and possibly a weapon). The tank might also carry vertical launch missile tubes for weapons similar to the SLID or EFOG. It would retain the trusty machine-gun as well. Its propulsion system would be conventional, with a diesel engine and tracked drivetrain. This represents a turning away from the turbine engine on the M1 Abrams: the new generation of diesels are just as

powerful but less fuel-thirsty and have a smaller infrared signature, although they are a bit noisier. A more radical possibility is a hydrogen engine of some sort. (No one is even talking about nuclear propulsion: given the outcry of environmentalists over depleted uranium ammunition – which is toxic but not radioactive – imagine the response if a reactor went into harm's way!).

The tank's crew (probably a gunner, driver and commander, though two-man crews are also possible with improved automation) would be seated in the hull, rather than the turret, giving them much greater protection, especially when the tank was in a hull-down position with only its turret exposed over a ridge. As with the IVIS version of the M1, sensor fusion would link them with other vehicles in the platoon and company, as well as supporting infantry.

A related vehicle program intended to be partnered with the FCS tank was the Future Scout Cavalry System (FSCS). A collaboration with the British Army (who called their version TRACER), it was to be a 20-30 ton tracked vehicle that would replace the M2/3 Bradley and HMMWV scouts with a dedicated recon vehicle that made full use of "third wave" information war technologies. FSCS was to have a three-man vehicle crew, armor good against light cannon, and a small turret mounting a 40mm automatic cannon good against other light armored vehicles or infantry. It would have a mast-mounted sensor (like an Ogre tower, only smaller) that could elevate to a height of five meters to look over intervening terrain or pop out of treetops, giving it the same kind of view currently enjoyed only by scout helicopters. However, the most radical innovation of FSCS was that it was to serve as a carrier vehicle for a family of remote-piloted drones (and later robots). There were to be two types of drones: semi-expendable Micro Aerial Vehicles (miniature UAVs) the size of model planes for aerial reconnaissance, and miniature Unmanned Ground Vehicles (UGVs). The MAVs would have low-light cameras and be capable of operating for about 15 minutes, giving each a range of 10-20 km, while the UGVs were to scout buildings and other areas where the enemy might hide. They were to be



small enough that a soldier could toss them through a window or carry them in a backpack, and controlled either by radio or fiber-optic cable link.

The FCS and FSCS vehicles described above embody concepts very similar to the Light and Heavy Tanks and the drones in *Ogre*. The FCS could be a good prototype for either the light or heavy tank, if the weight were increased. In fact, it is quite likely that that Europe, Japan, Russia, or some other power will build something very like it in the next 20 years.

## THE MEDIUM BRIGADE

However, the U.S. Army may not. The above descriptions represent the tanks and recon vehicles the U.S. Army wanted between 1995 and 1999 – but not any more. There has been a rethinking of how the U.S. will fight wars in the next 20 years or so, and the final specifications of both the Future Combat System and Future Cavalry Scout System have changed dramatically. There is a simple reason for this. The modern MBT is too large for long-distance transport.

In the Gulf War, Saddam Hussein gave the U.S.-led coalition months to deploy heavy armored forces to reinforce Saudi Arabia. It seems unlikely that a future enemy will be so accommodating. A big transport aircraft can (barely) carry a 40-ton tank like the proposed FCS, if there's a large runway in friendly hands. However, each plane can only carry one or two tanks, so you still can't airmail an armored brigade to a trouble spot – tanks will have to go by sea, which takes weeks or months. The only way to move an armored division built around 60-ton tanks and 30-ton infantry fighting vehicles is either by sea or through pre-positioning of equipment stocks. The solution is obvious: lighter forces.

Unfortunately, current U.S. light forces – a legacy of the Rapid Deployment Force of the 1980s – are *too* light. Units such as the 82nd Airborne or the 10th Mountain Brigade are basically men with rifles, mortars and anti-tank rockets in jeeps (HMMWVs) with a lot of air support. They can be shipped in quickly to dig in, but they lack tactical mobility – enemy armor will run rings around them. The 82nd Airborne troops who were the first U.S. forces to deploy into Saudi Arabia have no effective armor – the last U.S. light tank, the Sheridan, was a lemon, and its successor, the promising XM8 Buford, was canceled to pay for Bosnia. Currently, light infantry have to rely on anti-tank missiles and the U.S. Air Force to kill enemy tanks. With brilliant systems like Javelin, they'd give a good account of themselves, but since the U.S. also expects to fight while heavily outnumbered, that's not enough – and without armor, they have no credible way to counterattack or fight the high-mobility, swift-striking air/land battle that the heavier mechanized units in the U.S. Army are trained to use to beat superior numbers.

The near-term solution being looked at both in the U.S. and Europe is the so-called “medium brigade” – a force light enough to move by air, but heavy enough to fight and win against any likely opponent. The interim medium brigade may be mechanized infantry, and (in a radical shift for the U.S. Army) they will be equipped with wheeled armored vehicles, which can be much lighter than tracked systems. The “Interim Combat Vehicle” will likely be an upgraded version of the wheeled Light Armored Vehicle (LAV) family currently used by the U.S. Marines. The basic model is a turreted APC with a 25mm cannon, but there are also mortar and ATGM variants.

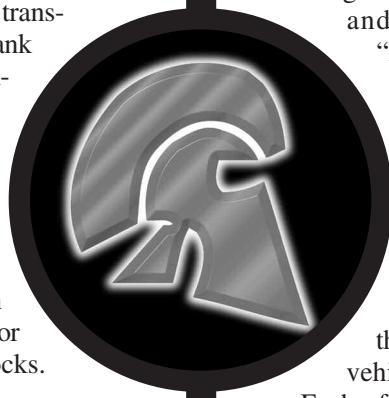
The U.S. Army will likely select an upgraded LAV configuration with digital sensor fusion systems based around IVIS. The vehicle will probably be similar to the LAV upgrade ordered by the Canadian army (which includes a version with a mast-mounted sight), but with the addition of Javelin, EFOG or LOSAT-type missiles for killing enemy tanks. Such a force would be competitive against a more conventional enemy tank or mechanized infantry formation, and with U.S. air power could, with luck, win against a numerically superiority but technologically or doctrinally inferior opponent. However, the U.S. Army does not like to have to tell the President that it “might” be able to win, which is why the vehicle and concept are pointedly referred to as “Interim.” In the 2010-2020 period, when the likely adversaries will also have their own brilliant missiles and satellite uplinks, it will not be enough.

As a result, the 40-ton Future Combat System has (as of January 2000) morphed into a different kind of animal. Instead of a single main battle tank and a lighter tracked scout vehicle, the current U.S. Army thinking is to create an entire family of new vehicles, all probably using the same chassis.

Each of these vehicles will weigh no more than 20 tons, enabling them to be carried easily by transport aircraft. The vehicles will likely incorporate composite hulls and some of the future armor technology (probably electromagnetic armor and electric armor) that was to be used in the FCS, with provision for extra bolt-on armor packages. However, instead of relying on heavy armor for crew survivability, the plan is to sidestep the issue. Current thinking is to make them robots – cybertanks.

The eyes of the Future Combat System will be an unmanned wheeled version of the Future Cavalry Scout System, with a large retractable mast-mounted sight and an array of smaller UGVs and MAV drones.

The teeth of the force will be two unmanned fire support vehicles. One will be a robotic Direct Fire Support vehicle, with a turret mounting a heavy cannon (see below), and possibly kinetic kill missiles. The other is a Non-Line of Sight (NLOS) fire support vehicle equipped with brilliant missiles, probably fiber optic guided, which will be capable of being launched from full cover and finding their own targets.



The force will be controlled by one or more manned command-and-control vehicles, which will operate as mobile command posts. These vehicles will also carry infantry squads for situations such as urban warfare and taking and holding ground. However, much of the infantry's traditional role of patrolling will be taken up by the smaller UGV robots that will be carried aboard the command-and-control vehicle and the unmanned recon vehicles.

Will the United States Army realize this ambitious plan? Perhaps. About \$80 million in contracts has been spent this year (2000), and there is a target date of 2012 for the first prototypes, with Medium Brigades converting to them between 2012 and 2020. One stumbling block may be the maturity of the robot control systems, and it is currently unclear whether or not the robotic fighting vehicles will be remote-controlled drones or true robots. The former seems more likely for 2012, but is quite possible that the vehicles could easily be upgraded as AI improves.

## FUTURE CANNON

The tank's main gun is a controversial subject. Today's 120mm cannon ammunition has been souped up nearly to its limit, and the best current rounds have trouble penetrating the frontal armor of a modern tank beyond point-blank range. The U.S. and NATO allies have been working on a 140mm cannon (and one Russian prototype may use a 152mm weapon), but the increased weight of ammunition is a major issue. It would be ideal to arm the tank with an electromagnetic railgun, which can accelerate small projectiles to extremely high velocities. These rounds would be similar in effect to LOSAT missiles, only much smaller, very hard to shoot down, and able to punch right through the heaviest of armor. A railgun would allow the tank to carry hundreds of rounds of ammunition rather than the usual 30-40. The big difficulty is storing the power to fire these shots. There are promising pulsed electrical power systems available (and possibly advanced superconductors down the road), but these are all speculative technology. If this does not pan out, the money is on either a conventional gun of 120mm to 140mm caliber firing a mix of dumb and "brilliant" target-seeking shells, or a hybrid electrothermal cannon. The latter concept uses a pulse of electrical power to energize a liquid propellant, producing projectile velocities higher than those of a conventional cannon but less impressive than a railgun. An electrothermal cannon in the 75mm to 120mm caliber might be equivalent to a 140mm cannon.

## BATTLESUITS

If FCS succeeds, it means that armor, artillery, and scouts will be robots, but infantry will still remain flesh-and-blood. However, they should be well-protected flesh-and-blood. Last year, the U.S. took the first step toward the powered battlesuit by soliciting proposals for the Exoskeletons for Human Performance Augmentation (EHPA) program. In the words of the contract solicitation,

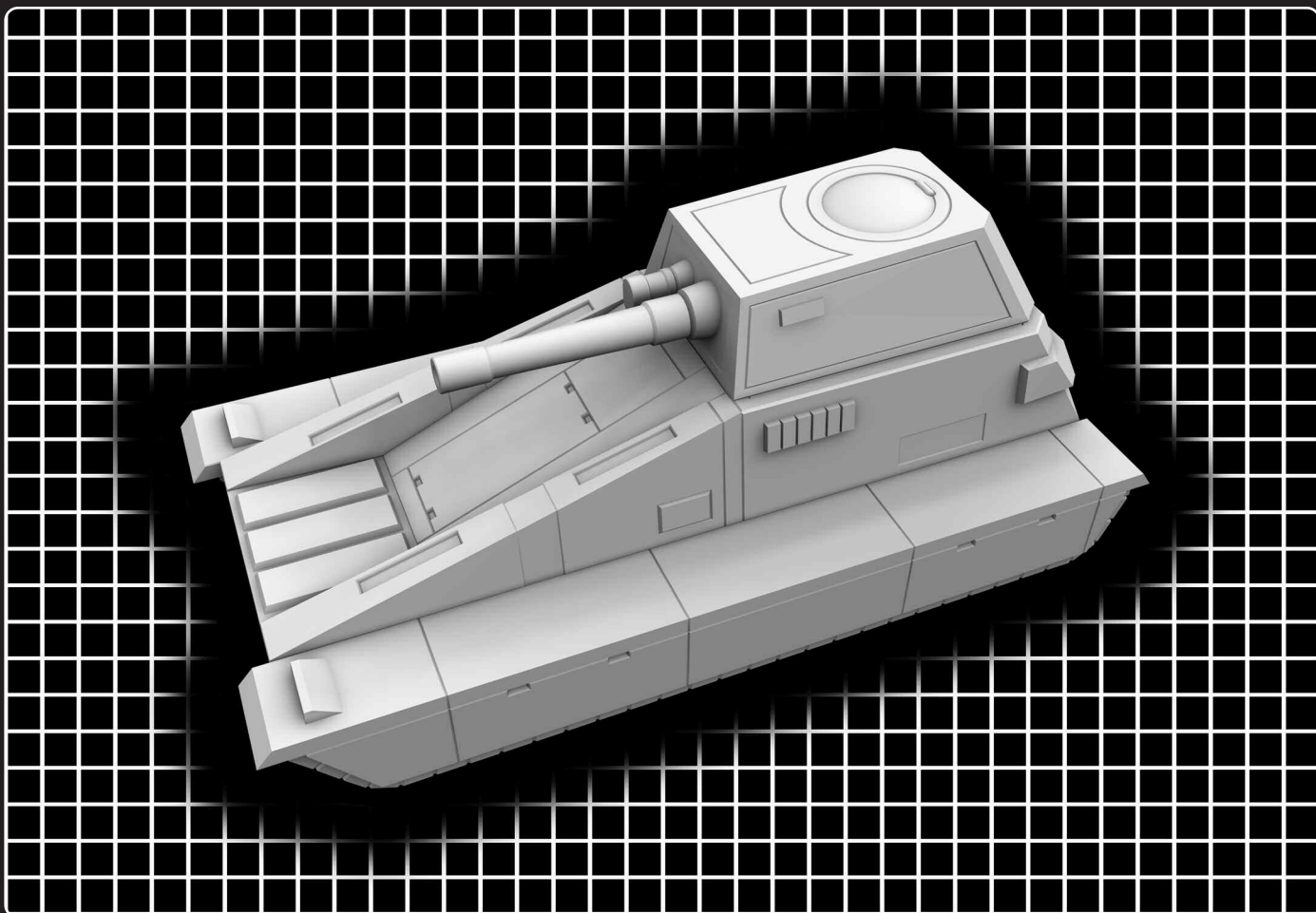
"The overall goal of this program is to develop devices and machines that will increase the speed, strength, and endurance of soldiers in combat environments. Projects will lead to self-powered, controllable, wearable exoskeletal devices."

There are still many issues to be addressed before we have the *Ogre* battlesuit, chief among them power, although several new hydrogen turbine designs look very promising. However, while Robert Heinlein-type powered suits have a long way to go in the near term, the Army's Land Warrior program is already underway. This initiative is designed to outfit every infantryman (starting with elite units and the new Interim Medium Brigades) with a system similar to that depicted in the movie *Aliens*. Each soldier will have a backpack and helmet-visor-mounted computer, head-up display, secure communication link, thermal imaging night vision system and GPS receiver. This will tie them into the same datalink that the new generation tanks and fighting vehicles possess, and fully integrate the infantry into the "network centric" combat team. The soldiers will be armed with brilliant missiles (Javelin) and a new double-barreled "smart gun" developed under the Objective Infantry Combat Weapon System program, which combines a 20mm laser-guided grenade launcher and 5.56mm assault rifle and thermal/television sighting system into one unit. The gun will link to the helmet-computer system, and allow the soldier to do things like extend the gun around corners and "see" through its sight, a useful trick in urban warfare. The prototypes of this gear have already been issued to a few test units, and if everything can be made as reliable in the field as it is in the lab, the system should be widely available by 2012 in time for the FCS. Later will come a new generation of advanced unpowered combat armor suits with full-head helmets and bulletproof armor, and it's only a matter of time until these are mated with an EHPA-style exoskeleton to produce the first real battlesuit.

## WHAT OF THE OGRE?

If the Future Combat System is actually fully funded and deployed, it will represent the first step toward Ogre-like vehicles and infantry. However, what about the Ogre itself? The drones and direct support vehicles are "robots" that rely on close human control. What about real AI – or at least, brains smart enough to control the robot tank on the battlefield?

True sapient AI remains a Holy Grail that has consistently eluded definition, let alone actualization. The pessimists wonder if it is even possible, pointing at decades of dead ends. Others, chief among them robotics pioneer Hans Moravec, remain optimistic. By 2050, a fairly conservative extrapolation of processor technology suggests that there will be computers whose processing power, measured in operations per second, equals that of the human brain. A decade before then – say 2040 – they will be equivalent to higher animals, which are quite capable as hunters. Whether or not machines at 2040 or 2050 will



be self-aware in some philosophical fashion, it is almost certain that they will be able to navigate over a complex battlefield, and identify and fire upon enemy vehicles. They may make mistakes, but, not being subject to glandular disorders such as panic or adrenaline rushes, will probably make fewer of them than the average human soldier. Moreover, they will certainly be able to learn.

The United States is leading the research into learning machines with military applications, and has funded numerous programs that are inching their way toward reality. For example, at Vanderbilt University, there is a DARPA-funded program underway to develop robot software that can interact with a human commander. It will enable the robot to clearly identify situations outside its existing programming, and call for new orders whenever it runs into a situation it cannot understand. The study mentions using the robot to transport supplies to isolated units under fire, but the same principles would apply to battle robots. Its long-term goals are even more intriguing. Instead of individual robots operating on their own (as in *Ogre*), they propose a team of mobile robots. These would act autonomously under human orders and be capable of individual learning, but they would also work together, linked by periodic low-bandwidth communications channels connecting them into what amounts to a collective intelligence. Individual robots would shift roles and functions as the combat situation required, and be both

individuals and a collective intelligence. Post-mission debriefing would allow the knowledge acquired by each individual robot to be shared among all robots of the type.

The future battlefield is likely to be dominated by robots: not just solo cybertanks on deep raids, but also light tanks, missile tanks, and reconnaissance machines, with humans serving as infantry and drone operators – perhaps both at the same time, as in *Ogre*. In the current global strategic environment, the new robot tanks are likely to be wheeled rather than tracked, massing 20-30 tons, for easy deployment on transport aircraft. Larger vehicles may come into vogue at a later date when continental powers like the European Union, Russia or India respond with their own drone tanks. Robotic armor will be backed up by swarms of tinier robots, from human to insect size. These would perform stealthy reconnaissance and artillery spotting operations, and may evolve into actual combat units, acting as tiny mechanical saboteurs or “fire ants.” Meanwhile, drone vehicles will gradually gain more and greater autonomy. Human nervousness at “machines that kill” will be ameliorated as robots pervade all other aspects of human life, and by the desire of the technological powers to avoid human casualties in brush-fire wars and police actions.

The question is not whether there will be Ogres on the battlefield of 2030 or 2050. The question is whether there will be any humans.



This review, the first ever published of *Ogre*, appeared in *Space Gamer* issue 11, in 1977. It offered some good basic tactical hints. It's bittersweet, now, to read the description and recall that we first sold the game for \$3.00 . . .

On the other hand, given what's happened to the value of the dollar since 1976, I suppose that \$14.95 for both *Ogre* and *G.E.V.* in one package isn't all that bad. I admit that it made my day when the first review of my first game called it "a lot of game in a little package." That's something to live up to.

## OGRE: A REVIEW

By Robert C. Kirk

*Ogre* is a lot of game in a little package. In fact, I was somewhat surprised when my copy arrived – the entire game comes in a 4 by 7 inch package. True, it is advertised as being small in format . . .

Anyway, the heavy paper map folds out to 8 by 14 inches and the 16-page rulebook not only gives basic and advanced game rules, but fits in several optional rules as well. Miniaturized versions of the excellent graphics by Winchell Chung which illustrate the text are printed on the counters which come in three shades (white, light gray, and dark gray) to facilitate multi-player play.

The rules both read and play well. Read through them, play the basic game once with the booklet for reference, and you will have learned a new game. The only record sheets you need are easily whipped up in about 10 seconds on a piece of notepaper. They serve to record the progressive destruction of the Ogre.

When setting up the game, the non-Ogre player locates his command post, missile cannons, armored tanks, and infantry within the rubble area of the map. The rubble serves to hinder movement of anything less than an Ogre. The Ogre enters the map from the river at the far end. Combat results are designed so that the Ogre is blown apart a piece at a time. On the other hand, anything an Ogre hits, if not totally demolished, is at least temporarily out of action.

The Command Post's sole objective is to survive. The Ogre must be immobilized while it is still out of range – a

weaponless Ogre can ram and crush the CP, an immobile Ogre can blow it to bits. If the defending general becomes too concerned about destroying the Ogre's arms, the brute will stoically drive right through the post. This is invariably fatal to generals, but doesn't even bruise Ogres.

Strategy is dependent on the player's skill and the composition and placement of forces. In general, the GEVs should not be overestimated – they're fast, yes, but the Ogre is almost as fast and has a

longer weapon range. Howitzers are wasted at the edges of the map. Locate them centrally so they can fire to either side. Ignore Ogre weapons and shoot for the treads – you'll lose some tanks until the Ogre runs out of missiles, but unless you can slow him down so that your own tanks can keep up, the Ogre can drive straight for the command post, ignoring anything in its way.

If you're the Ogre, keep as far away from those howitzers as you can. Don't waste missiles on them, use them on the enemy missile tanks – they have a range greater than your guns, and unlike the howitzers, they're mobile. Your mass is probably

your greatest weapon – ram as often as convenient. If this doesn't kill the enemy tanks right off, it at least knocks them out for the next turn and makes them cheaper to kill.

*Ogre* is attractive, easy to learn, inexpensive, and fun to play. What more can a gamer ask?



**S**teve Cole is better known as the man behind *Star Fleet Battles* – but in the early days of gaming, when dinosaurs roamed the earth and 20-sided dice were a novelty, he sent this vignette to *Space Gamer*. It was the first *Ogre* fiction ever published, and it perfectly captures the hopeless feel of the front lines of the Last War.

Continuity note: No, Ogre power plants don't blow up that easily. But it's a great story anyway, and it added "in the iron" to the *Ogre* lexicon.

## DUEL

By Stephen V. Cole

Major Kahelski tried, for the twentieth time that day, to scratch himself. He and his battalion had been nine days in the iron so far this trip. Perhaps they would be relieved today? He fervently hoped so. The biofunctions system of his armor had failed the night before and his legs were already caked in filth. They had better be relieved today.

He heard a distant rumble, and the ground beneath him began to shake. Within seconds he was thrown from his feet, scrambling wildly to reach the nuclear-tipped tacmissile at the other end of his foxhole. The minor earthquake came to an abrupt halt. Kahelski leaped to his feet, to see a half-dozen of the nearer men in his battalion also appear from their holes. The Ogre gleamed in the sun, sitting warily just over a mile away. He lowered the missile to his waist. It was one of their own.

"Damned Ogres," he muttered to himself. Then, switching on the communicator with a click of his teeth, he spoke to the men of the 214th Battalion. "It's one of ours. Get back in your holes and get some sleep." He tried once again to reach Brigade, but the circuits were still dead. In all probability, so was the Brigadier. Kahelski wondered just what an Ogre was doing in his zone. Wherever Ogres went, there was trouble for the poor bloody infantry.

Abruptly the ground began to shake again, though not quite as badly as before. Flicking his helmet lenses to a higher magnification, the Major saw a dust cloud to the south. He did not have to see the Ogre to know what it was. Only the multi-thousand-ton monster tanks, moving at 40 clicks or better, could stir up that much dust. From the direction of its approach, he assumed it was another friendly. Then, to his horror, the new Ogre stopped abruptly, maybe three miles off, and turned in his direction.

The Major swore under his breath. Looking to his right, he saw the "friendly" Ogre turning to face the

enemy. Before he could alert his men, both of the cyber-tanks fired their missiles in ripple salvo. Diving to the bottom of his hole, he felt tons of earth landing all around him, as nuclear missiles rained around the nearer machine. As he lay there, he hoped that one of the robots – even the 'friendly' one – had been eliminated by the opening salvo. A duel between two Ogres was no place for the infantry.

Kahelski began to pull himself from the collapsed foxhole, trying meanwhile to contact his company commanders. Two were dead, with their sergeants reporting in their stead. The third was alive but badly shaken.

The two Ogres now charged each other straight on, firing all their weapons as they went. The enemy unit was apparently not a good shot, as many of his shells were falling among the 214th. Dimly, through the dust, he could see the two machines stop about a mile apart and fire heavily and directly into each other. The filters on his view lenses clicked into position to screen out most of the flash from the nukes as Kahelski continued to watch, fascinated. Somewhere in the maelstrom of nuclear fire, one Ogre now charged the other again. Kahelski could no longer tell them apart. The second Ogre was now moving as well. They collided, and the power piles of both cracked and blew. It was not a full self-destruct, but it was good enough.

Within a few hours, the crater had cooled enough for an armored man to approach. What was left of the two cybertanks, a twisted mass of BPC, could be seen at the bottom. By that time, Kahelski had reorganized his battalion. Out of some 200 men, 90 were dead. Most of B company was indeed gone; he would have to make do with the other two.

"Damned Ogres," he swore under his breath. Perhaps tomorrow they would be relieved.

This was written less than a year after the initial release of *Ogre* . . . but the game had already sold a rather ridiculous number of copies and had gone into a second edition. As you see, the first edition had not been without its game balance problems; the new edition corrected them, as discussed here. The “Fuzzy Wuzzy” GEV strategy (see p. 35) was what taught me to *playtest the dumb strategies*.

This was the first appearance of cybertanks other than the Mark III and V, and it was very much a “trial balloon” – these designs hadn’t seen much play when the article

appeared. Some turned out to be pretty well balanced, but others didn’t; the final, official Fencer, for instance, has only two secondary batteries, which *forces* a Fencer player to avoid slugging matches. Likewise, the III-B was referred to as an “enemy copy,” but in the final version of the timeline, it became an experimental Combine design that was *not* copied by the Paneuropeans.

I made one casual wrong guess here. I said we’d have GEVs within a decade. Okay, it’s been *two* decades, and more. Where are our military hovercraft?

# ANOTHER #@\*\*\$%\$?!!

## OGRE ARTICLE

By Steve Jackson

There are two reasons for that title. The first is that, to the best of my knowledge, there are three other *Ogre* pieces in this issue of *TSG*. The second is that I’m trying to cover four different subjects. So I gave up looking for an appropriate title and just started writing.

The subjects I’m going to cover are: (1) Responses to *Ogre* . . . some of the better mail we got. (2) The *G.E.V.* problem – a lesson in game design. (3) An upcoming game in the “Ogre universe,” and notes on the Mark I, II, IV, and VI Ogres. (4) Possible rule revisions for the original *Ogre* game.

## THE MAILBOX

One of the most pleasing things about *Ogre*, to me, was the volume and quality of the mail it generated. Letters, questions, and variants, and stories for *TSG* . . . it’s been interesting to see what others have done with the *Ogre* concepts. About the only thing that hasn’t come in is new art. Winch Chung’s stuff is great . . . but it would be interesting to see other artists’ interpretations.

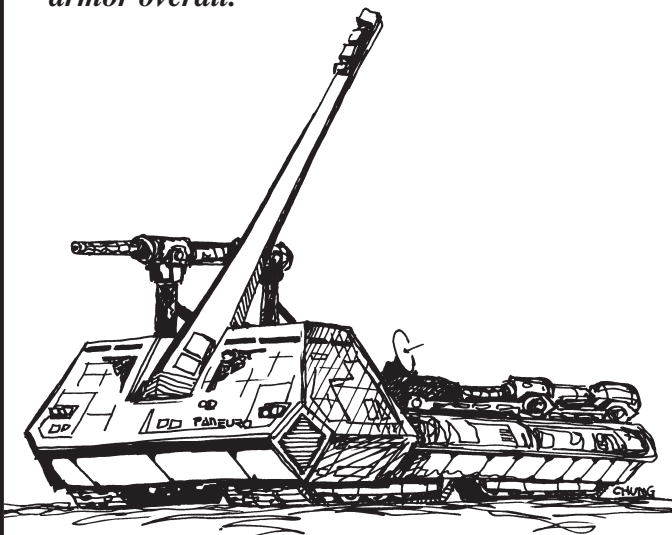
Most of the mail shows a good deal of thought. I plan to steal the best comments and suggestions for future *Ogre* games . . . crediting the originators. Fair is fair. A sampling of the better mail to date:

Mark Ratner (who designed *Space Marines*, and says he’ll be judging a large *Ogre* tournament at GenCon) sent in 3 pages of economic calculations on Ogres (he doubts they’d be cost-effective) and some excellent, if complicated, advanced movement rules. He also suggests (as have several others) that there should be provisions for mobile howitzers. (Wait for the new game.)

Tracy B. Harms sent in a suggestion for a Mark IV with a starting movement of 4. We’d been playtesting something similar . . . but his way was more logical, and when you see the proposed Mark IV specs later in this article, the movement’s done the way he suggested.

Greg Costikyan reviewed *Ogre* in his magazine *Urf Durfal* . . . called it “the ideal game to play whilst stoned.” Okay, Greg.

*An early drawing for the Light Tank.  
This model was sent back to the shops for  
a heavier gun, lower silhouette, and better  
armor overall.*





Several people have sent in “perfect” defenses relying heavily on Howitzers. I hate to say this, but my own Ogres go through those like a knife through butter. What strategy do you use to make six or seven Howitzers work?

And a lot of people . . . too many to list . . . have pointed out that a defense composed of all GEVs wins the Basic Scenario most of the time and the Advanced Scenario too often. They’re right. Which leads to . . .

## THE GEV PROBLEM

In a nutshell: If a GEV fires on an Ogre and moves 4 away, the Ogre cannot kill it next turn, no matter what, if it has lost its missiles and either its main battery or its 3 movement. Therefore, a mob of GEVs can harry an Ogre to death, unless the GEV player gets over-confident and lets the Ogre cat-and-mouse his force to death. This is not good.

This had two causes. The first was the counter mix. The first edition was originally planned to provide 56 counters, in three distinct shades . . . light gray, dark gray, and white. But, at the last minute, we found we could afford to put in twice as many. And the printer fouled up . . . on the counter sets, light and dark gray look the same once cut out. So, instead of having 8 GEVs available, a defense commander has 22 . . . making some new strategies possible.

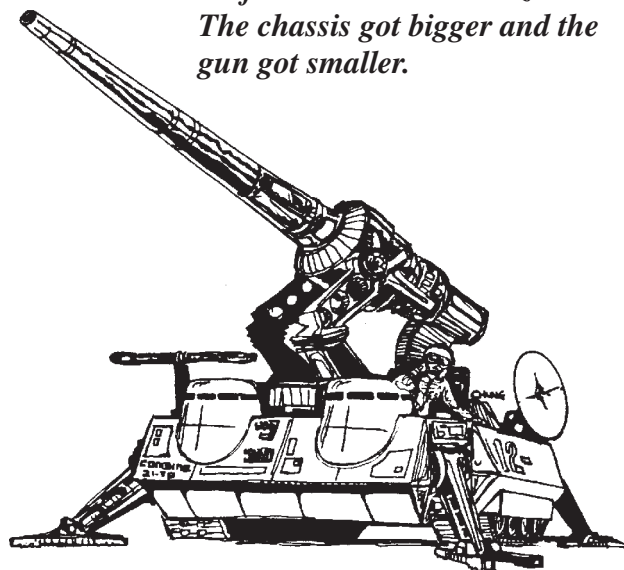
People still seem to enjoy *Ogre*. I like it myself. At this point, I can’t rate it better than fair as a wargame. But it seems to be pretty good science fiction. It gives people a chance to exercise their imagination (and blood lust), and the mechanics are adequate to support the illusion.

But we still have the Super GEV – and, worse, the Useless Heavy. *In spite of* the counter mix glitch, the GEV is, value for value, the best unit, and the heavy tank the worst. Under certain circumstances a couple of heavies can chew up an Ogre . . . but four GEVs do it better. You don’t really notice how good a GEV really is, though, until you take it in against a force of regular armor units. If six GEVs attack six heavies on clear ground, they kill the heavies and take no losses in the process.

The fact that the armor units weren’t balanced against each other doesn’t distress me much; they were (originally) intended only to balance against an Ogre. (But see below!) They are almost balanced, except for the Heavy. What happened? I made a mistake. (Yes, folks. Steve Jackson just admitted to a mistake. Hell will freeze over any second.) I’m owning up to it, not because I like looking dumb, but because I see a lot of game designs with similar errors. I doubt I’ll ever do it again . . . and, if I point it out here, maybe you won’t, either.

It’s a question of cost and balance. Each of the armor units was given a balance of speed, defense, and fire-power, roughly analogous to those of present-day units (except for the GEV, and we’ll have those within a decade.) Then, having carefully balanced the units on a one-for-one basis, what did I do? I turned around and wrote the rules so that a Heavy “cost” twice as much as a GEV. Therefore, it’s about half as cost-effective.

*Winchell Chung's concept art for the Mobile Howitzer. The chassis got bigger and the gun got smaller.*



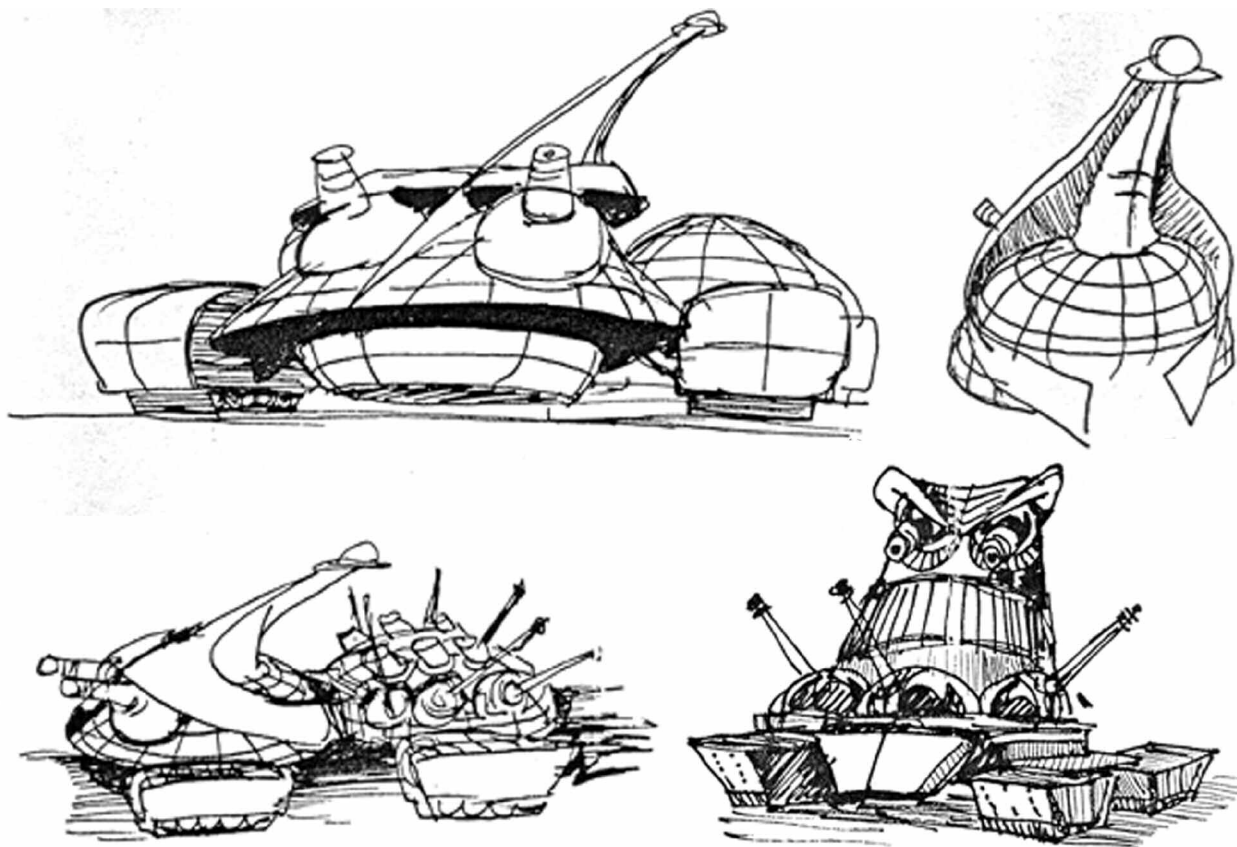
Why didn’t it show up in playtesting? Two reasons. (1) The game is, as I said, good science fiction. We were all having so much fun that, if the Ogre won about half the time, we were happy. (2) Through one of those annoying glitches, all of the playtesters *liked* heavy tanks. Seldom, if ever, was a defense tried without some heavies. And they do work very well to clobber a weakened Ogre.

So why didn’t the over-strength of the GEV show up in playtesting? We playtested a lot – literally hundreds of games – and we didn’t always limit ourselves to the counter mix we planned to supply. It didn’t show up because using all GEVs “seemed” like a dumb strategy. “Everybody knows” that a balanced force is more flexible. I remember trying an all-GEV defense just once, just as we tried an all-howitzer defense just once. It didn’t work – at the time.

The moral here is: if you want to get all the bugs out of a game, *playtest the dumb strategies*. If you are doing a Civil War game, and your rules give the battle to the side that charges uphill against entrenched positions, you don’t have much of a game . . . but if you playtest with Civil War experts, you’ll never find out about it, because they’ll never be stupid enough to try. *Playtest the dumb strategies*. That was the second lesson I got from *Ogre*. Make sure that the things you don’t think should work, *don’t* work. Or you’ve got some redesign to do.

Okay. Enough preaching. Suffice it to say that the new *Ogre* game will have these bugs debugged. Yes, you heard me right. A new *Ogre* game.

(For those of you who wonder what the “bugs” in the first edition were: try playing with a GEV that moves 4/4, a Heavy Tank that moves 2, and a setup that values each armor unit solely on the basis of attack strength – 35 points of armor attack strength for the basic scenario, 65 for the advanced – SJ)



Japanese Ogre sketches by Winchell Chung, from 1994.

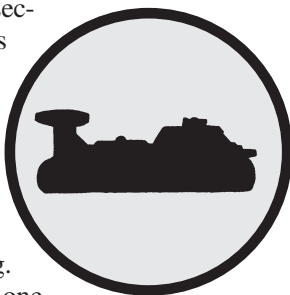
## G.E.V.

The working title for the second game in the *Ogre* series is “*G.E.V.*” It’ll be a game simulating combat between the powered infantry and small armor units of circa 2085.

*G.E.V.* will introduce a number of new rules, including terrain effects and stacking. It will also introduce at least one more “regular” unit type, and give the specifications (if there’s room) for the Ogre Mark IV.

The way we will fit all this in is by *not* repeating the “Ogre” rules from *Ogre*. . . just the armor and infantry rules. In other words, if you have *Ogre* and buy *G.E.V.*, you will be able to play Ogres on the *G.E.V.* map . . . and we *will* supply terrain rules and scenarios for Ogres. But if you don’t have *Ogre*, you can buy *G.E.V.* and get a tactical armor game that stands by itself . . . with a number of optional references to things called Ogres and a few Ogre Mark IV counters.

That way, we have our cake and eat it too. *G.E.V.* will stand by itself, and play well. (Incidentally, the *G.E.V.* map will be bigger than the *Ogre* map.) *G.E.V.* will also



tie in 100% with *Ogre*. And each game will have stuff that the other lacks . . . so the total amount of material is greater.

There’s a possible third *Ogre* game in the works, as well as a bigger game pulling all the rules together and supplying a large tactical map.

## THE OTHER OGRES

We’re also playtesting other cybertanks for use in later games. Therefore, below are our present “models” for five other computer-guided monsters. Again, we invite you to playtest these, and see what you think – suggestions, art, new scenarios, ways to balance these with existing scenarios, etc.

### OGRE MARK I

The Combine’s first cybertank experiment. Simply a beefed-up heavy with computer guidance.

- 1 Main Battery (4/3; D4) ○
- 4 Antipersonnel (1/1 against infantry, etc. only)
- 
- 15 Tread Units
- (M2)
- (M1)
- (M0)

## Ogre Mark II

The Mark I worked, but it wasn't really cost-effective. Since it was now clear that the "brain" could handle several weapons at once, the Mark II was designed with a larger chassis and more guns.

- 1 Main Battery (4/3; D4) ○
- 2 Secondary Battery (3/2; D2) ○○
- 6 Antipersonnel (1/1 against infantry, etc.; D1)  
○○○ ○○○
- 30 Tread Units  
○○○○○ ○○○○○ (M2)  
○○○○○ ○○○○○ (M1)  
○○○○○ ○○○○○ (M0)

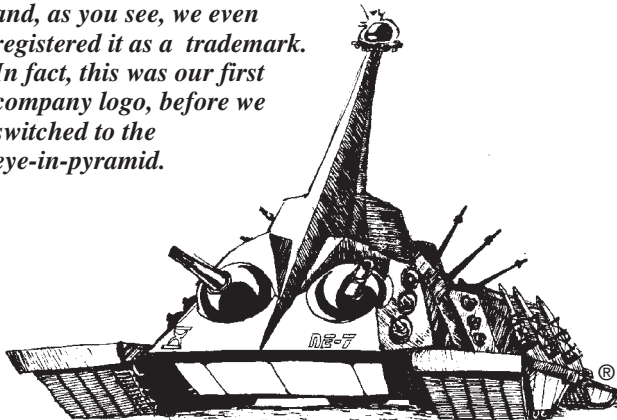
Then came the Mark III — the first really fearsome Ogre, and the first one to be useful as a battle-line unit. You know about the Mark III. Its success inspired enemy copies . . . like the III-B in "Iron Mountain" (p. 59). It also inspired a more-than-copy. The first wholly Paneuropean cybertank was called "Fencer" by the Combine. It lacked the characteristic Ogre "tower," and carried a new type of weapon: the missile rack.

## PANEUROPEAN "FENCER" CYBERTANK

- 4 Missile Racks (D4) ○○○○
- 20 Missiles (6/5)  
○○○○○ ○○○○○ ○○○○○ ○○○○○
- 4 Secondary Battery (3/2; D3) ○○○○
- 8 Antipersonnel (1/1 against infantry, etc. only; D1)  
○○○○ ○○○○
- 45 Tread Units  
○○○○○ ○○○○○ ○○○○○ (M2)  
○○○○○ ○○○○○ ○○○○○ (M1)  
○○○○○ ○○○○○ ○○○○○ (M0)

The Fencer has no main batteries, and only four secondaries. Its main weapons are the missile racks. Each missile rack has a defensive strength of 4 and can fire one regular missile (6/5) per turn. That is, an undamaged

*The Winchell Chung drawing that became the "canonical" Ogre. This illustration, and the silhouette version, are the most widely recognized pictures of the Ogre, and, as you see, we even registered it as a trademark. In fact, this was our first company logo, before we switched to the eye-in-pyramid.*



Fencer can fire four missiles per turn. The Fencer carries 20 missiles; check each one off as fired. When all missile racks are dead or all 20 missiles are fired or dead, the Fencer cannot use missiles. Destruction of a missile rack destroys one missile. This is the *only* way to kill a Fencer missile; they are stored *inside*.

## Ogre Mark IV

The Combine turned around and copied the Paneuropean missile racks for the Ogre Mk IV, adapting them to the Ogre design and their own desire for a light "raider" unit . . .

- 1 Main Battery (4/3; D4) ○
- 2 Secondary Battery (3/2; D3) ○○
- 3 Missile Racks (D4) ○○○
- 15 Missiles (6/5) ○○○○○ ○○○○○ ○○○○○
- 8 Antipersonnel (1/1 against infantry, etc. only; D1)  
○○○○ ○○○○
- 60 Tread Units starting at M4  
○○○○○ ○○○○○ ○○○○○ ○○○○○ (M3)  
○○○○○ ○○○○○ ○○○○○ ○○○○○ (M2)  
○○○○○ ○○○○○ ○○○○○ ○○○○○ (M1)  
○○○○○ ○○○○○ ○○○○○ ○○○○○ (M0)

## Ogre Mark VI

The biggest Ogre ever built — although later cybertanks of other designs massed more.

- 3 Main Battery (4/3; D4) ○○○
- 6 Secondary Battery (3/2; D0) ○○○ ○○○
- 2 Missile Racks (D4) ○○
- 20 Missiles (6/5)  
○○○○○ ○○○○○ ○○○○○ ○○○○○
- 16 Antipersonnel (1/1 against infantry, etc. only, D1)  
○○○○ ○○○○ ○○○○ ○○○○
- 75 Tread Units  
○○○○○ ○○○○○ ○○○○○  
○○○○○ ○○○○○ (M2)  
○○○○○ ○○○○○ ○○○○○  
○○○○○ ○○○○○ (M1)  
○○○○○ ○○○○○ ○○○○○  
○○○○○ ○○○○○ (M0)

For ramming, assume that the Mark IV and Fencer are the same size, and that each succeeding marque of Ogre is bigger than the preceding ones. A Mark I Ogre is treated as an ordinary heavy tank for ramming; a Mark IV or Fencer does 4 dice damage when it rams, and a Mark VI does 6 dice damage.

Have fun with these — let us know how they perform for you. A Mk IV and a Fencer should be about equal — Fencer a little better in slugging matches. Either one should kill a Mk III. A Mk V should be able to take either a IV or a Fencer — but it gets badly hurt. A VI can smash anything.

If you find good ways of putting these into scenarios, let us know. Have fun, and may a Mark V not walk through your house.



An excellent way to provide “artificial intelligence” in a solo game. The suggestion to move the CP forward in the next game if you beat the Ogre, and backward if you lose, is especially elegant!

You know, somebody really ought to write a simple PC or palmtop program to help control and randomize an Ogre for solo play. Not a game program – no fancy display – just a decision maker. Sound interesting?

# THE UNCERTAINTY PRINCIPLE: MODIFICATIONS IN OGRE

By Brian McCue

All of the versions of *Ogre* are good games, but two of the suggested variations seem to beg for modification. These were the “Duel” scenario and the Solo Play.

Many games which advertise a solo version (e.g., AH’s *Jutland*) merely set up a system for randomizing the strategies of the two sides, leaving the player with little to do. In *Ogre*, it is suggested that one predetermine the strategy for one side, and play the other side actively, as if against an opponent. But if one can be certain, for example, that the Ogre will charge straight on, one can set up a

“turkey shoot” defense to bombard the thing as it goes by. There is then little feeling of playing a game or of fighting an intelligent machine.

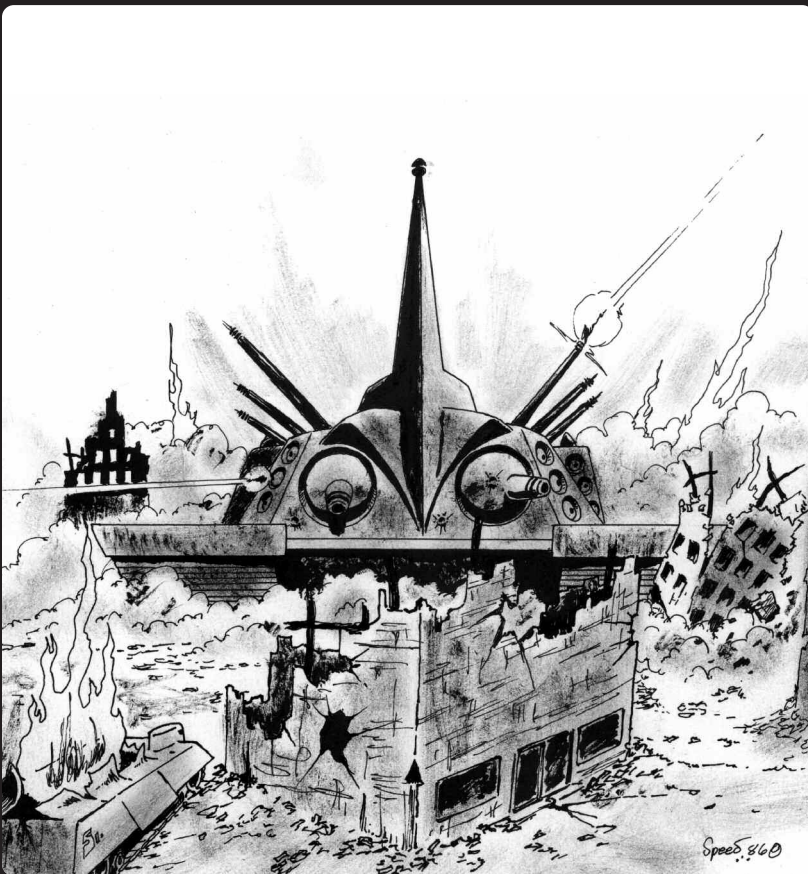
My method of solo play is a combination of the two above; I randomize the Ogre’s play, and defend against it. Here’s how to set it up: make ten cards, five labeled “Advance,” two each labeled “Go left” and “Go right,” and one labeled “Attack rear.” Shuffle these and remove one from the pile, setting it aside without seeing what it says. Now set up your defense as against a real opponent. Put your command post and the Ogre on the center line of the board.

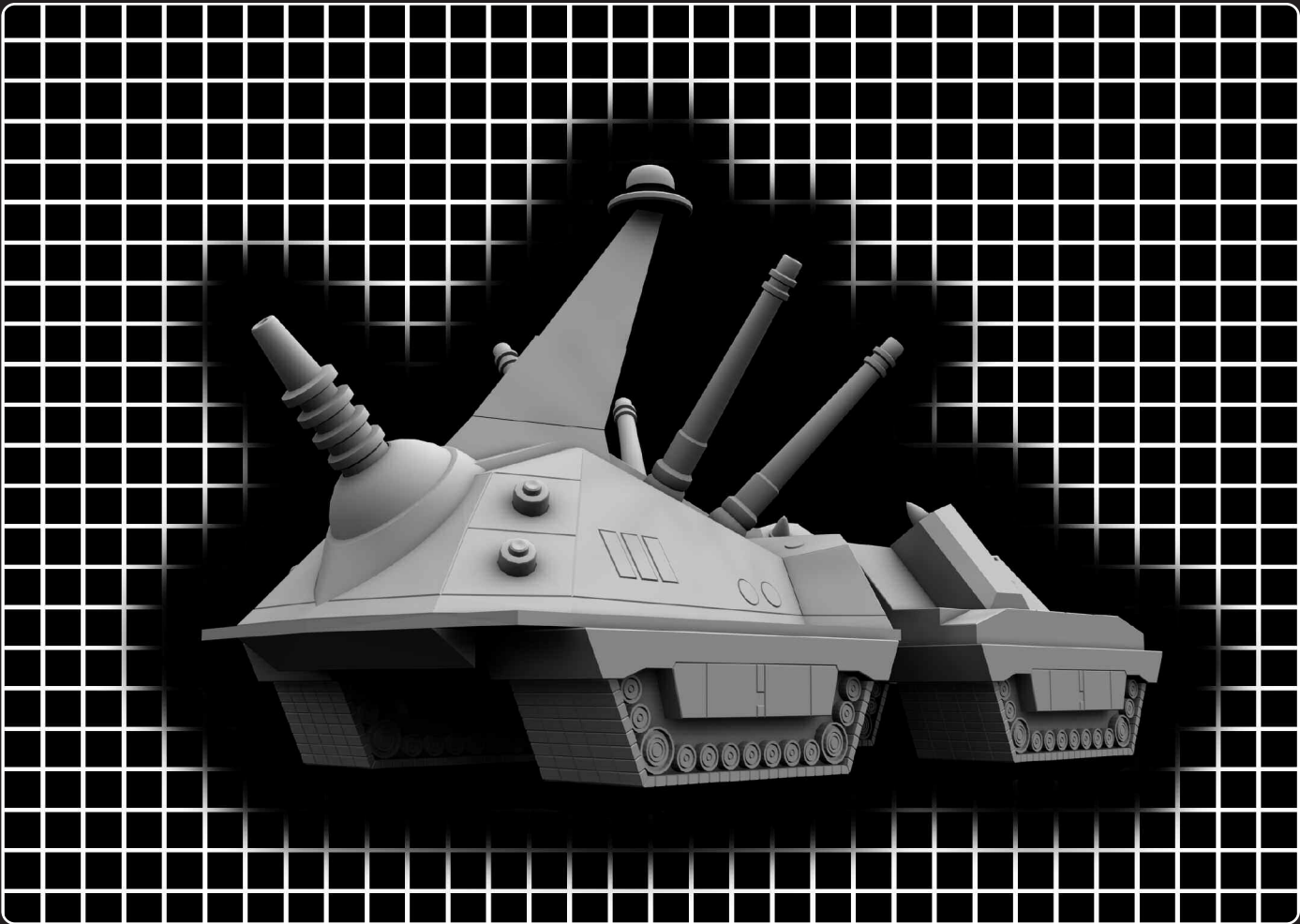
To play, shuffle the Ogre’s cards and draw one, follow the orders on it in a sensible manner, and conduct the defense as you see fit. You *will* have to make some choices for the Ogre, particularly how to apportion the weapons among the available targets, but such choices can be made consistently, if not automatically. You could even expand on the card-drawing system.

The purpose of that unused card is to prevent you from knowing the exact likelihoods of the various Ogre tactics. As the game progresses, you can begin to guess which card the Ogre is missing. (But beware that Attack Rear order, which often appears after you’ve ruled it out!)

You will probably find that you can beat the automatic Ogre too easily. I recommend the following remedies:

- 1) Move your command post closer to the front.



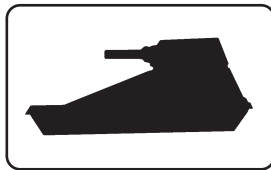


- 2) Limit yourself as to howitzers.
- 3) Simply cut down on the strength of the defense.

Number two alone may not do it, and number three could lead to boring games. Number one can give you any level of excitement or challenge you want. Whenever you win a game, move the command post two hexes forward for the next game, and move it back whenever you lose. It will stabilize somewhere, giving you an even match against the Ogre. After all, the Ogre is supposed to be as smart as one person.

The Duel scenario, however dramatic, seemed to me to be lacking in strategic content. After re-reading one of Laumer's *Bolo* stories, I realized that one should not know exactly what damage the enemy Ogre has sustained, and that Duel in particular would be a better game with that feature. I set about drawing up a workable system which would prevent each player from knowing his opponent's losses, and yet keep both players honest.

Before the game, both players make a secret Combat Results Table. Each column must have the same entries as the standard table, but they may be rearranged in any manner. For example:



### SCRAMBLED COMBAT RESULTS TABLE

| Roll | Combat Odds |     |     |     |     |
|------|-------------|-----|-----|-----|-----|
|      | 1-2         | 1-1 | 2-1 | 3-1 | 4-1 |
| 1    | NE          | X   | NE  | X   | X   |
| 2    | NE          | NE  | X   | NE  | X   |
| 3    | NE          | X   | NE  | NE  | X   |
| 4    | NE          | NE  | X   | X   | X   |
| 5    | X           | NE  | X   | X   | NE  |
| 6    | NE          | NE  | NE  | X   | X   |

Note that the Ds have been changed to NEs because they are the same for purposes of hitting Ogres.

During the game, the players keep track of their die rolls. They record the roll, the odds, and the target on a turn-by-turn record sheet. Each player secretly manages his Ogre Record Sheet, using his secret combat results table, and being sure to note *when* each hit was taken. At the end of the game, skeptical players (i.e., losers!) may compare the opponent's combat odds table, die roll record and Ogre record to their own die roll records to verify that sufficient strength was available to make each attack. Any player found to have erred in his bookkeeping is held to have lost. I advise using Mark III Ogres in order to keep the paperwork to a minimum.

This one pretty well speaks for itself. At the time I wrote it, just after finishing *G.E.V.*, the game system had reached more or less its final form. The world still had a lot of development ahead of it – and, in some ways, it still does, because it continues to grow. But the style of the game was pretty solidly set.

I had gotten good reactions to the vignette that appeared with the original *Ogre* rules (the one that's interspersed with the article starting on p. 4). For space reasons, there was no vignette in *G.E.V.*, but I wrote several short, connected ones for this article. I've never been able to write anything longer than a short, short, short story, but creating these vignettes helped put me into the mood of the game, and I still enjoy rereading them.

# **G.E.V. – A DESIGNER'S INTRODUCTION**

by Steve Jackson

*The hovercraft jumped and bucked as it made the transition from river surface to shore. Then it was off, speeding across the grassland at better than a hundred kilometers per hour. To the west was river and dark forest; to the east, the sun was just coming up, dim and red in an unnaturally dusty sky. To the north, closer every minute, was the target area: depots, communication centers, bridges – still dreaming in the red morning.*

*Asleep, but waking fast. To the north, alarms buzzed, orders were given, machines growled to life. In a buried command center, an officer cursed and ordered a call for reinforcements.*

\* \* \*

*G.E.V.* is the sequel to *Ogre*. In a way, it's a game of *Ogre*, without the Ogres . . . a straight infantry/armor game, set in the future. In terms of complexity, it's a step up. The map is bigger; more counters are involved on each side; movement is considerably more complicated. But anyone who's played *Ogre* will recognize the game.

I've wanted to do a game like this ever since *Ogre* came out. I enjoy *Ogre* – but it only covers one type of situation. The idea of interactions between the “little stuff” fascinated me – are GEVs good against anything except an *Ogre*? Are infantry good for anything at all except sacrifices? What's the best defensive “line” you can put together with *Ogre* units?

Working out the answers was fun – and, in the process, a new game was born.. As I'd hoped, the addition of terrain effects and detailed overrun rules made a big difference. *G.E.V.* allows both players a wide choice of tactics – and the system is flexible enough to fit all kinds

of scenarios. One thing didn't change, though. *G.E.V.*, like *Ogre*, has a roleplaying element. As the attacker, you get to smash, pillage, and burn – but you have to conserve your force. As the defender, you're trying to hold the line with a grossly inadequate force . . . but the reinforcements are on their way!

\* \* \*

*Even inside the howitzer's cabin, the sound was deafening. Outside? It didn't bear thinking about. Captain Vanetti returned his attention to the screens. He had ten attacking units to deal with – five of which were concentrated on his own position – and that was just too many. Sword One was not only a worthwhile target in its own right; it was the keystone of the line the attacking units were trying to breach. Vanetti reflected that he really ought to be frightened.*

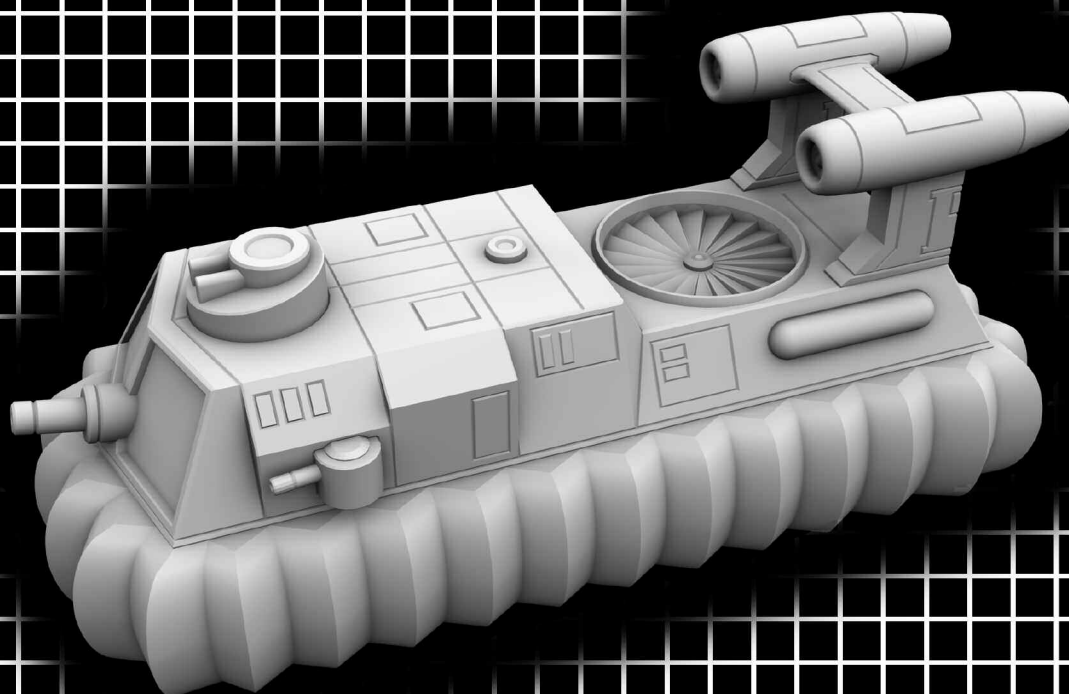
*The gun's thunder let up momentarily. In the sudden silence, Vanetti's gunner grinned. “Two down – ten to go!”*

*“Make that nine,” replied Vanetti. Unless his screen lied, one of the attacking hovercraft had just gone to a fiery death – and the nuclear shells that killed it could only have come from one place. “You got another one!”*

*But the Combine units were reforming and coming in. “Sword One to Shield One. Pull in a bit; they're coming back.” Because the infantry screen was three kilometers in front of his own howitzer, he was still here – but it was time to draw them in. The terrain here was better for GEVs than infantry; the patches of woods were small and far apart. But his men were holding – so far.*

*“Shield One to Sword One, pullback accomplished.” Good. The infantry could not chase hovercraft – but they*





could wait under the umbrella of howitzer fire, making a rush impossible. The GEVs could hit them, but only by coming within howitzer range. Twice they'd probed at his position and at Sword Two to the west. They'd killed some infantrymen . . . but their own losses had been higher.

Then the thunder began again, and more shells sought the foe. Vanetti's eyes went back to the screen. He had eight squads left, ranged in a semicircle around his own position. Sword Two had only six – but Sword Two was a mobile unit. Its range was less, but it could move toward – or away from – the action. Vanetti and Sword One would have to sit still for whatever the Combine could dish out.

The Combine attackers were doing their best. Nine globes of light – estimated enemy positions – moved toward the defensive line. Two . . . three . . . suddenly shrank to pinpoints – confirmed sightings. One of his own screening points died, then, and the enemy points slowly diffused again. Then one winked out, and another began to blink. Good!

Vanetti shot a look “westward” at the lights representing Sword Two's area. He blinked. Then, suddenly, he understood . . . and sweat broke out on his forehead. While his own units had stopped their side of the attack, Two had not been so lucky. Only two of its infantry squads were still reporting. Sword Two was intact and pulling back – but there was no way it could escape. At least four enemy GEVs were alive over there, and looking for blood.

His own position was better – for the moment. Two active enemy units on his side of the map, one more crippled. And they weren't moving fast enough to escape.

Vanetti barked orders into his mike, sending his remaining infantry into action – toward the enemy hovers.

“Sword One to Sword Two. Get back this way.” Even as he said it, he knew the order was futile – tracks were just too slow. But it was worth a try. “Leave ours to the iron men. Help Two,” he told the gunner.

It almost worked. The “iron men” of Shield One climbed all over their three targets. Sword Two hit one of its own attackers. Sword One crippled another. And three other Combine hovers closed on Sword Two, blew it into superheated gas, and buzzed off toward the north. Seconds later, the “cripple” followed them.

“Sword One to Shield One and Shield Two. Get back here. Form up for defense, centerline 240. They might be back.” Then, switching frequencies: “Sword One to Alpha. They're past us. Sword Two bought it. At least four live ones, coming your way. Good luck.”

Then, his duty done, he slumped in his chair. Sword One had accounted for three enemy GEVs and had come through unscratched. But it couldn't follow the battle. Even if the hovers turned south again, they wouldn't come this way – not with an open spot just to the west.

Vanetti began to allow himself to hope. He might just live to see tomorrow . . .

Vanetti was very lucky. The scenario could have been Breakthrough or Raid – each starts out with a force of Combine GEVs moving north – but, either way, the defending screen is in deep trouble.

There's really no way to build a secure defensive line with a handful of armor and 20 points of infantry. But it's interesting to try. One of the best ways is the one just described – a couple of howitzers, situated to take advantage of streams and forests, with the infantry in front. The invading GEVs can't get within firing range of the howitzers without overrunning the infantry. They can't go around the infantry without taking unacceptable losses from the howitzers. And they can't snipe at the infantry unhindered; the howitzers' range is too long. What they do, of course, is concentrate on one point, overload the defenses locally, and break through – but it takes a while, during which time the reinforcements will keep coming.

Of course, the armor in the screen doesn't have to be howitzers. Either heavy or missile tanks will work, and you get twice as many units. However, it becomes absolutely vital to make good use of terrain in setting up your defensive line – otherwise the GEVs will get in the first shot and cripple you.

## TERRAIN

The treatment of terrain in *G.E.V.* is abstract – though certainly not more so than in most wargames. Terrain affects both movement and combat in a fairly standard fashion. GEVs are the most strongly affected by terrain; favorable types (roads or water) speed them even more, while bad terrain (woods or swamp) slows them drastically and can even disable them.

Terrain effects for Ogres are also given, so they can be used in *G.E.V.* scenarios. For the most part, Ogres ignore terrain. Swamp, however, is anathema to Ogres; they can get *stuck*. Heavy tanks have most of the same movement abilities as do Ogres – reasonable, since the Ogre is just a highly-evolved Heavy. One provision – the ability of Ogres and Heavies to totally ignore woods and streams – is definitely unrealistic. There would be *some* effect, even though “woods” is taken to mean fairly light forest, and streams are small. However, heavy and superheavy armor ought to be able to treat such obstacles fairly lightly – and, for game purposes, the best way to show that proved to be the simplest. As a result, heavy tanks (and Ogres, if you have them) are most effective behind streams and in woods, which is just where the GEVs are least useful – which can have a number of interesting tactical ramifications.

Towns slow movement but provide defensive bonuses for all units. Demolished town hexes (and there are a lot of those, especially in the “Raid” scenarios) have the same effects on both movement and combat – another inaccuracy in the interest of simplicity. Actually, an area of demolished buildings should provide slightly less cover (for armor, anyway) and impede movement more. The added complexity didn't seem worth it.

## INFANTRY

One of the most depressing features of *Ogre* (realistic, but depressing) was the way infantry units died, and died, and died. Sometimes they made all the difference (to me, one of the marks of a good *Ogre* player is the way he handles his infantry), but even when they saved the day, they were cannon fodder.

It doesn't work that way in *G.E.V.* The reason? Simple. In *Ogre*, the infantry were in a very bad position – terrain with few hiding places, facing a very thick-skinned opponent covered with AP guns. *G.E.V.* gives the infantry the benefit of some “traditional” infantry abilities. To me, this makes sense. A lot of things will change in a hundred years . . . but if we're still using infantry, we'll still be using them to take and hold ground. Infantry aren't fast; they don't have long-range weapons. But they can go nearly anywhere, and they're hard to kill.

*G.E.V.* simulates this in two ways. First, the infantry can enter absolutely any terrain on the map . . . even water, though they can't fight while “swimming” in their suits. Furthermore, they get the best defensive bonus for terrain: doubled defense in woods or swamp, and tripled in towns.

Second, of course, is the overrun rule. This cuts two ways, and both are good for infantry. In a defensive role, the infantry can spread out in a line to stop enemy movement; any unit which tries to move through (overrun) that hex will be fired on before it can fire. In an offensive role, two or three squads of infantry can move onto a single enemy armor unit; the enemy unit will fire first and get some of the infantry, but the infantry will almost certainly finish off the armor unit (unless it's a Heavy Tank) when they fire . . . and since overrun fire takes place during the movement phase, the attacking infantry will get a second chance to fire, afterwards. In *either* case, the attack strength of infantry units is doubled in overrun attacks, reflecting the increased utility of infantry weapons at close range.

We toyed with the idea of increasing the range on infantry weapons, allowing the infantry to open fire on all non-Ogre units at a two-hex range, while retaining the one-hex range against enemy Ogres. However (though this satisfied everyone who enjoyed seeing the infantry clobber tanks), it took some of the flavor out of the game. With the present rules, infantry *must* keep near cover and do its fighting at close range. When it does, it's deadly.

One other rule that didn't make it into the final *G.E.V.* package was “specialist” infantry: engineer units and heavy-weapon teams. The engineers would have had the ability to blow bridges (or construct pontoon bridges) at need; the heavy-weapon teams would probably have had the ability to act (once) like missile tanks, as far as attack ability went, after which they would be replaced by regular infantry counters. Either type would also have the ability to take over enemy installations under certain circumstances (though, if a heavy-weapon unit which has

expended its missiles is replaced by a regular counter, it shouldn't lose its special knowledge! Small problem). However, we simply couldn't work the special infantry types into the counter mix without taking out too many of the other units – so this idea was knocked out fairly early. It may surface again, in an expansion set.

## THE NEW UNITS

Three new unit types are presented in *G.E.V.*: the Light Tank, the Mobile Howitzer, and the Ogre Mark IV.

The Light Tank was originally developed for *Ogre*. It didn't survive the first few rounds of playtesting, though; it proved to be the least successful unit type, and there were enough different kinds of units without it. However, by cutting down its defense slightly and making it cost only half as much as the other tank types, it became a viable unit for *G.E.V.*

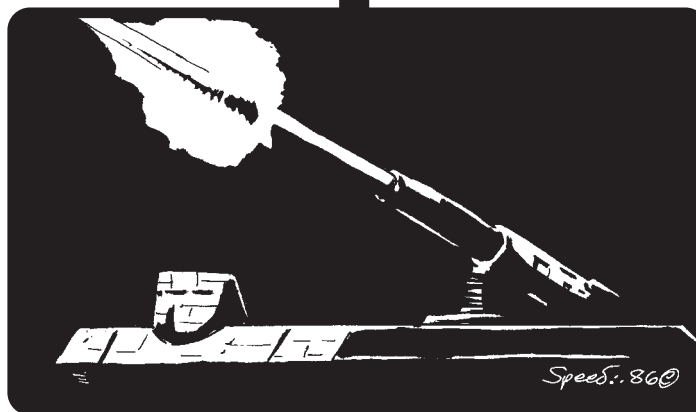
The Light Tank has a movement of 3 – the same as a Heavy. In all other ways, it is like a GEV: its attack strength and range are 2. However, a player can take two light tanks instead of one “armor unit.” Thus, the strategies based on large numbers of relatively cheap units became possible.

The Mobile Howitzer was definitely a case of “popular demand.” Practically everyone who wrote to comment on *Ogre* suggested adding a long-range unit with some movement ability. As first playtested, the MHWZ had the same defense (D1) as the howitzer. After playtesting, its defense was increased to 2.

Since the MHWZ gives flexibility to a defense, and can be used in an attacking role if necessary, it is generally more useful than the regular HWZ; the two cost the same. Occasionally, its two extra hexes of range make the regular howitzer the better choice – e.g., when enough other units are available to guard the howitzer's own position.

The Ogre Mark IV specifications are listed in *G.E.V.*. Rules for playing Ogres are not given, except where they interact with new rules (such as terrain). Thus, *G.E.V.* does not duplicate *Ogre*, but builds on it. However, if you already have *Ogre*, and use Ogres in *G.E.V.*, the Mark IV specifications given will make sense to you.

The Mark IV is a “raider” type unit. A Mark IV, though fully as expensive as a Mark V, would not be able to stand up to the V in a slugging match. The IV's advantages lie in speed (it starts with M4 movement) and range (it carries 20 missiles, fired from “missile racks”).



\* \* \*

*“Okay, Beautiful. Do your stuff.”*

*“Beautiful” – more formally known as Unit 11, 22nd Armored, Third Army Paneuropean – didn't respond. Heavy tanks don't talk. Her commander had never seemed aware of that. Nobody was likely to criticize him, though. A man who had been through a dozen firefights without serious injury was a man deserving respect. The 14 silhouettes in a neat row on the turret elevated him to near godhood. Even if he did talk to the damn tank.*

*“All right. Get us behind that wall.” He was addressing the driver, now. Corporal Paskos didn't question the command. If the commander thought that little wall would help, he could have it.*

*“Are they in range yet?”*

*“Not yet,” replied the gunner, “visual any second, unless these are ghosts here . . . No! Commander!”*

*But it was too late. The two GEVs bounding madly over the top of the hill had been firing for a full half-second before they cleared the crest. Certain of the tank's position to within a hundred yards, they sprayed the entire area with death. Standard operating*

*procedure. Out of dozens of shells, one was well-aimed. Beautiful disappeared in a gout of red fire.*

*On board the lead GEV, eyes and machines reported the same news. Definite visual contact with an enemy heavy. Then, a fireball. The two hovercraft skidded down the hill, their paths diverging slightly. The lead gunner turned his scope on the spot where the heavy had been, to see if a mopup was required.*

*Aboard Beautiful, the gunner's cry had been the last word spoken. Then the enemy shell had hit – not the tank itself, but the wall in front. Two meters isn't much . . . but the difference between a contact nuclear blast and one two meters away was enough. Beautiful's BPC hide was blast-burned and rock-pelted, but unbreached. Her crew, though . . .*

*Inside, no one moved. BPC armor and cast circuitry can take more punishment than a man. A long time (for the tank) went by with no new orders from any of the three crewmen . . . no perceptible action at all. A second after the shell hit, an orange button lit by each of the three men. None of them punched it. None of them did anything at all.*

*With the mechanical equivalent of a shrug, Beautiful took matters into her own hands. A pressurized tank jetted stimulants into the ventilation system. As for the situation outside . . .*



Seventeen units were within sensor range; an additional 23 were included in the latest data pulse from CP Beta. Eleven were known hostiles. Two were immediate targets; Beta's pulse listed them as hostiles, they were within mutual firing range, and they didn't respond to Beautiful's own IFF. They were, in fact, the two attacking hovercraft.

As the lead GEV's gunner focused on the blackened heavy, he muttered under his breath. The armor looked intact. Better put a couple of rounds into it, just to be safe. As his hand tightened on the firing control, he realized that the "dead" tank's main gun was tracking him . . .

The other GEV skewed to the side as its companion fireballed. Neither of the crewmen had seen what happened, but the enemy heavy was once again putting out a whole spectrum of jamming. The GEV's side gun opened up and its turret swung around

Beautiful rolled to the side. Her short-range radar showed an obstruction to the left; she was programmed to take advantage. Her jamming devices went on and off in random patterns, sending messages and images designed to fool every type of sensor up to and including the human eye.

The surviving GEV was in full flight now. Whether its gun was being controlled by human, computer, or both, it wasn't hitting. Shells exploded in all directions, but none came within 20 meters. Even the humans inside could have taken that. Beautiful hardly noticed. Her own gun came to bear, fired, fired again . . .

Inside Beautiful, the commander woke and shook his head. "Paskos! Ferguson!" He looked at his screens, and shook his head again. No enemy units within six clicks? "Paskos, make for 1412. We may still be able to do some good." He hit switches to transfer gun control to his own position; Ferguson had a concussion, or worse.

Back at base, he would order the maintenance men to put the new kill-silhouettes in a new column, just as though the tank had had a different commander. Beautiful had gotten those two on her own.

\* \* \*

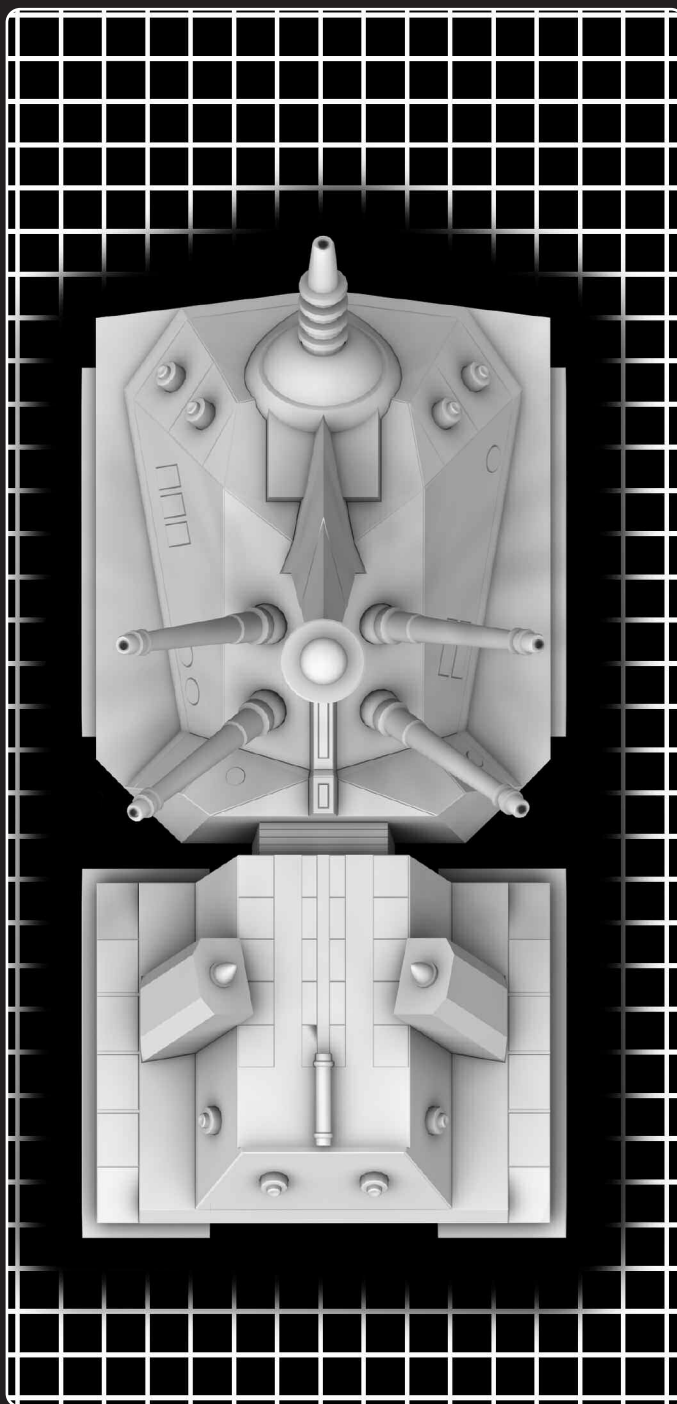
## STACKING AND OVERRUNS

One of the basic simplifications (read: shortcuts) in *Ogre* is the one-unit-per-hex rule. I felt (and still feel) that this is justifiable, especially on a nuclear battleground. However, it's not *physically* impossible to get units much closer together. So stacking is allowed – up to five units per hex – with the provision that, if one unit in the hex is fired on, other units in that hex also suffer an attack at reduced strength and effect. It's not illegal to stack, but it's often unwise. If you *have* to concentrate your force into a small area you'll do so – but just like a real field commander, you'll be biting your nails at the thought of what a concentration of nukes could do to your units.

Of course, if you can stack with friendly units, you ought to be able to move in on enemy ones. I threw out

the *Ogre* concept of "ramming" here, creating the only real discrepancy between the games. (Everything else in *Ogre* can be taken as a special case of the *G.E.V.* rules.) The result was a somewhat complex, but realistic, set of overrun rules. (However, if you think *they're* complicated, you should have seen the *first* draft! Alexander Epstein, one of the playtesters, suggested a better way to do it; the final rules are a cross between his suggestion and Lynn Willis' Close Assault rules from *Olympica*, with further simplifications.)

Basically, any units can move onto any other units, initiating an overrun attack. Combat occurs immediately. All defenders fire once; all surviving attackers then fire



back . . . and so on, until only one side remains. Because of the deadlier nature of close-range combat, all “D” results count as “X” (no units are disabled, they’re destroyed instead) and both infantry and Ogre weapons fire at double strength.

Overrun combat has one further aspect – which I’m really pleased with, because it adds another science fiction element to the game. If an already-disabled unit is overrun, it is not automatically eliminated; it attacks at half strength and defends normally. This is because every vehicle is assumed to have an on-board computer. Not intelligent, not an Ogre, not smart enough to maneuver or fire over long distances without a human commander. But smart enough to take control of the vehicle and attempt to defend itself while the crew is out of commission. (I imagine that the tank designers of 2085 would tout *all* their armor as being capable of “fully automatic,” unmanned operation; I also expect that, under combat conditions, relatively inexpensive computer “brains” would perform only about as well as the rules reflect. If a *little* computer could replace a man, there’d be nothing out there but Ogres.)

\* \* \*

*John DeVries was no soldier, but his reflexes were excellent. When he heard the explosions behind him, he pulled the car off the road, slewed it around, and killed the motor almost without thinking. Then he cursed himself bitterly. “Ceasefire,” indeed. He had probably just gotten himself killed – and his family, too*

*From the back seat came a chorus of questions. “What’s happening, Papa? Are we there yet?” His wife, white-faced, soothed the children.*

*Then a plume of dust appeared on the road, moving the way they had been traveling, and growing. “Look! A convoy!” cried the older DeVries boy, excited. Military convoys were great fun for the eight-year-old; sometimes the soldiers were friendly.*

*The “convoy” whipped past, ignoring the little civilian vehicle canted on the roadside. Six hovercraft, with Combine markings. It wasn’t a terror-raid, though, or they would have fired on the car . . . Minutes passed.*

*Then the sky lit to the north, toward town, and DeVries understood why the GEVs hadn’t bothered to shoot at them. They had had bigger game in mind.*

*“Quick, love, get the kids out of the car. We’ll head for those trees over there.”*

*She stared at him, uncomprehending. Leave their car? “They’ll be back.”*

\* \* \*

## PLAYTESTING

*G.E.V.* underwent the most thorough pre-publication playtesting of any of my games to date. In addition to the local (Austin) group of playtesters, copies were sent to about 20 individuals or groups around the country for “blindtesting” – that is, playtesting without the (dubious) benefit of personal contact and discussion with the

designer. Most of these were people who had written articles or comments about *Ogre*, of such a nature that we thought they could make worthwhile contributions to a new game in the series.

The playtesters, almost without exception, did an excellent job. They had been given a mass of material to work with and examine (the first packet sent out contained a complete draft of the game; a supplementary packet about a month later contained changes, additions, corrections, and suggestions from the playtesters themselves). I was pleased (and relieved) when the letters began to come back in, and it became clear that most of the rules were being read the way I had intended. In some cases, they weren’t – and that indicated where to rewrite.

However, the playtesters did more than just point out the weak spots in the writing. They were also quite upfront whenever they felt something ought to be changed. Quite often, I found myself in agreement. (Occasionally, of course, I thought they were nuts.)

On the whole, though, this experience left me sold on the merits of detailed playtesting. Certainly the playtesting added to the time and expense of finishing the game. On the whole, though, I think it was worth it; the efforts of the playtest groups made *G.E.V.* a faster, clearer, and more realistic game. I appreciate it.

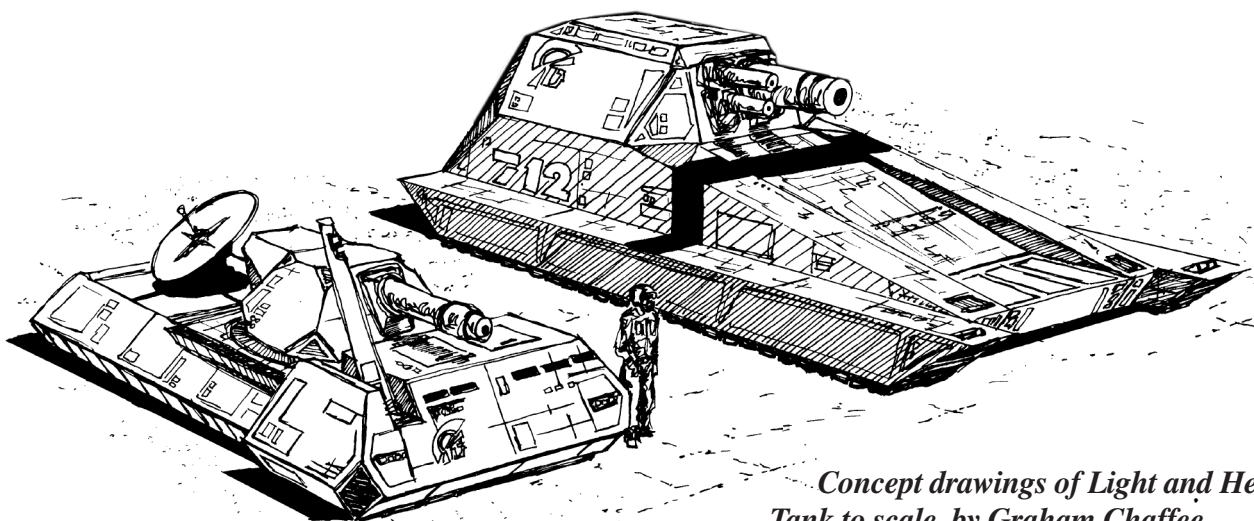
## SCENARIOS

*G.E.V.* includes four scenarios, each with several variants (including *Ogre* variants, naturally!). Each of the four is different.

**Ceasefire Collapse** is a straight slugging match. The players have equal forces; the objective is simply to do as much damage as possible to the enemy. This game could easily be adapted to a much bigger map – say a *PanzerBlitz* or *Strategy I* hexsheet – or a do-it-yourself terrain map. This is a good scenario for sharpening your general tactical ability.

**The Train** is also a slugfest; typically, it starts with an incredible hammer-blow attack against a heavy defense, and the rest of the game is mopping-up by one side or the other. Since the important question is the survival of the train, though, neither player can afford to spend too much attention on the wholly military objective of destroying enemy armor. The attacker needs a good balance between heavy units (to smash the defender’s combat capability) and GEVs (to harass the train, cut the track, or both). The defender needs to be everywhere at once; if he is willing to accept heavy losses, he can win.

**Raid** got the most playtesting here in Austin – probably because it’s a lot of fun. Originally, this one was titled “Atrocity.” The name’s changed; the game is the same. Basically, a force of GEVs comes on the bottom of the map. Their objectives: destruction of bridges, town hexes, command posts, and any enemy units that get in their way. The defending force is pathetically weak . . . but reinforcements come in every turn. Typically, a “Raid” game goes through the following stages:



*Concept drawings of Light and Heavy Tank to scale, by Graham Chaffee.*

1) The attacking units enter the board, pick up a few easy targets, and begin probing assaults against the defending screen.

2) The defending screen is bypassed, or collapses, or both, taking a few GEVs with it. More town hexes get blown away. If the attacker has handled his units well enough, he can retire at this point with a marginal victory – but usually greed will overcome prudence.

3) The defender begins to organize his reinforcements. Since both the type of unit and the place are randomly determined, he never gets what he wants – but sometimes, as the song goes, he gets what he needs. You may wind up with a few infantry units far away from the action – but, once in a while, you'll get a missile tank in just the right place to waste a GEV that was miles away from any other defender. It evens out.

4) At least half the attacking units are gone; the defender has whipped his random reinforcements into some kind of shape. The GEVs are going after a major town complex somewhere on the board, and the defender is sweating blood.

5) All of a sudden, there are only a few attackers left. They still have superior mobility (unless the defender picked up and kept a number of GEVs himself), but to attack any further targets is to court destruction. This is the point where a wise attacker runs for it.

"Raid" scenarios are the longest, but probably the most challenging.

**Breakthrough** is an interesting situation. The attacker's objective is not combat – it is simply to get as many units as possible through the enemy lines and off the board to the north, as quickly as possible. Thus, the attacker can win by *avoiding* combat. This is a good game because it teaches an important lesson: a military operation does not necessarily call for immediate, bloody confrontation. It's important to be able to pick your time and place – which is what "Breakthrough" is all about.

## COMBINATION SCENARIO

If you have two game boards (or take careful notes about what units leave the map and when) you can combine "Breakthrough" and "Raid." Use the "Raid" victory conditions only. Use the "Breakthrough" setup with 16 GEVs. GEVs (and defending units) leaving the map to the north immediately enter the "Raid" scenario. The "Raid" defense is set up as for the 12-GEV game, and reinforcements do not begin on the "Raid" map until turn 8. Thus, the sooner the attacker can get his units onto the northern map, the more damage he'll be able to do. The maps should be arranged so that one is directly to the north of the other, with the roads connecting. The river will *not* connect; no matter. The "Breakthrough" defensive setup is placed on the southern board, and the "Raid" defensive setup on the northern one. All units may move freely between boards. Defenders may escape from the N, E, or W side of the northern board. Attackers may escape only from the S side of the southern board.

Of course, any number of other scenarios can be concocted. One letter I received suggested a scenario in which a damaged Ogre is moving slowly back toward friendly lines; a relief force is coming out to escort it in, and an enemy force is coming to finish it off. That can be interesting. We also had fun with a "Raid" variant using Heavy Tanks, instead of GEVs. A force of Heavies makes a bad enemy, grinding across and through the streams and forests toward your vulnerable areas. Interestingly, where the best tactic for a GEV group is to bunch it up and hit one weak area, a Heavy Tank force seems to do best by coming in along a broad front and smashing everything in its way. Look out for infantry, though; a Heavy can sometimes live through an overrun, but it can't dodge it. Hit the infantry, before it hits you!



The original version of this article was written after the first edition of *Ogre* appeared. The Fuzzy Wuzzy strategy, as first described, was very effective. The author ended the article with several suggestions for altering the game to make a mob of GEVs less potent – and some of those suggestions were incorporated into the second and later editions. The numbers in the present version of the

article have been changed to make them fit current rules editions. The Fuzzy Wuzzy attack is no longer the “one best” strategy – but it can still give the Ogre headaches if skillfully done!

The first paragraph is unintentionally funny now . . . it refers to a concept resurrected from the “mists of wargaming antiquity.” Well, now we’re resurrecting it again!

# OGRES AND THE FUZZY WUZZY FALLACY

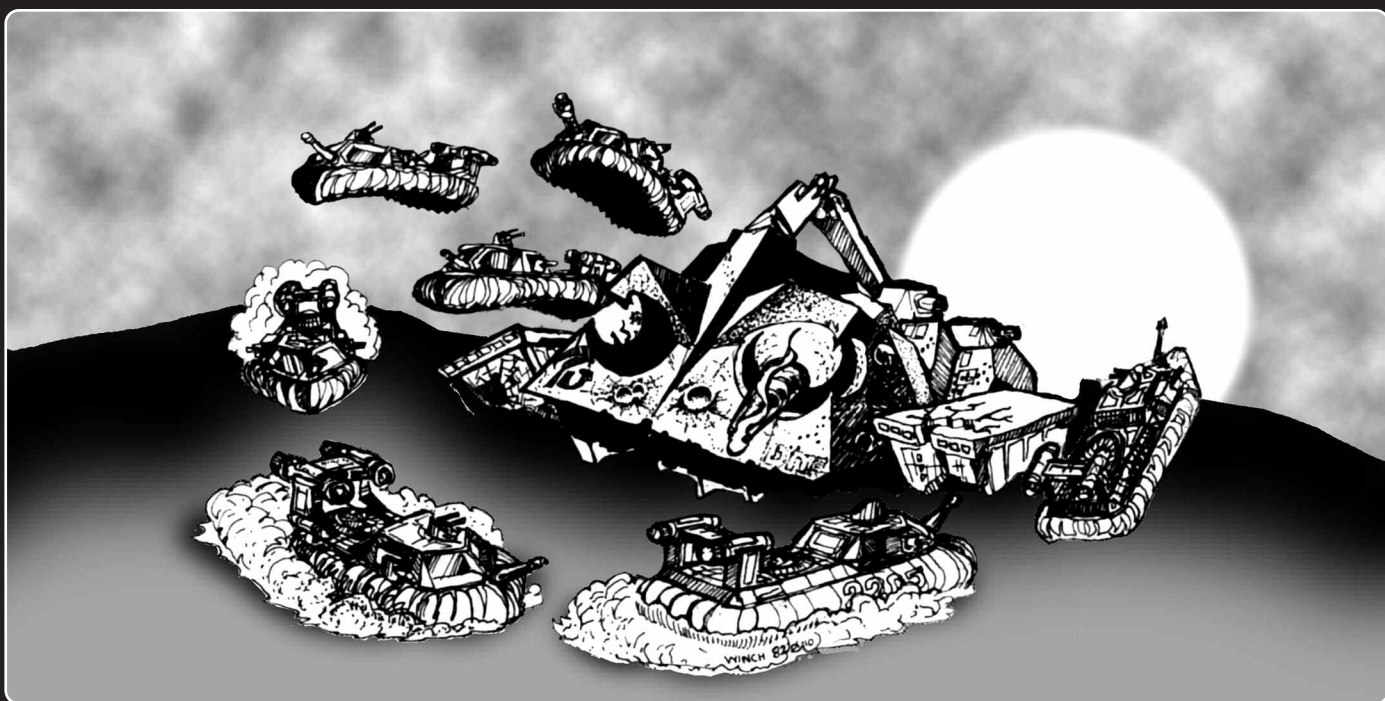
By Lawrence Duffield

In the September, 1976 *Avalon Hill General*, Richard Hamblen resurrected a useful concept from the mists of wargaming antiquity. Since then, I have applied the concept to everything in sight, and it has become an important tool in my wargame analysis.

Briefly, the Fuzzy Wuzzy Fallacy states that a man with a firepower of 2X is not worth twice the value of a man with a firepower of X, but rather roughly  $\sqrt{2}$  as much, after taking into account that one hit on either man kills just as dead. (See, the Fuzzy Wuzzies were this African tribe, and they beat a British square . . .)

The Fuzzy Wuzzy problem is magnified in *Ogre*. You see, there is only *one* Ogre. So, all you defenders out there, quivering in your Command Posts, take heart. Me and the 2205th GEV Battalion are gonna show you how to save your bacon.

The mechanism of a Fuzzy Wuzzy attack is simple. Attack the enemy over a long enough time with a great number of targets and he will be destroyed by sheer weight of numbers. Note the two critical criteria: *time* and *numbers* of attackers.



*Numbers* are obtained by selecting Ground Effect Vehicles for the entire Armored force. In the Basic Game, this means 12 GEVs. In the Advanced Game, 20 GEVs.

GEVs have two important advantages besides numbers. They are the fastest vehicles in the game and so can choose their ground in relation to an Ogre. And, due to the second Movement Phase, GEVs can avoid all casualties from Secondary Batteries, once the Ogre's speed is 2.

*Time* is the second criterion. Ogres can reach missile firing range on a Command Post in six turns, and can overrun on the eighth, if left fully mobile. The defender *must* reduce the Ogre's mobility by turn 3 at the latest, or at least force the Ogre to dodge and give up ground. This dictates the opening strategy.

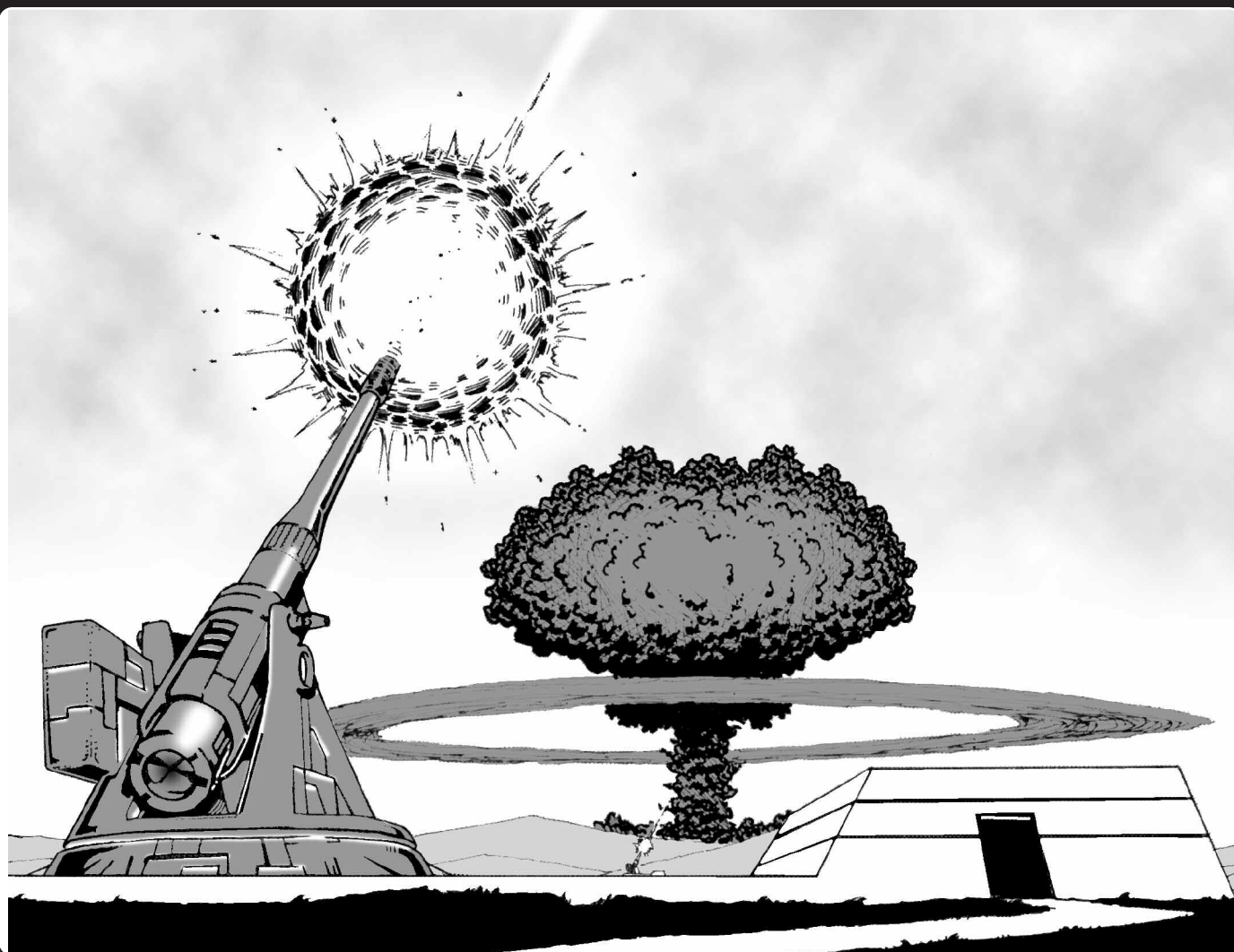
Deploy your GEV battalion in a loose line across the board. In the basic game, there will be gaps. Leave them near the center, so that on the initial turn, *some* firepower can be directed at the Ogre no matter where it enters. The line should be at a range of 7 hexes. Infantry and anybody else required to set up in the rear are deployed as far forward as possible. There is no reason for the CP to set up anywhere but the rear edge of the board.

When the Ogre enters, converge as many GEVs as can reach the beastie. Fire individual attacks against the

treads. Your only mission at this time is to cut down the Ogre's speed to 2, regardless of casualties. In the Advanced Game, an alternate strategy is to knock out one main battery by 1 to 2 attacks (48% chance if four GEVs attack) so as to reduce casualties. But the main consideration is to cut down the Ogre's speed *quickly*. On the second movement phase, move everybody away from the Ogre and out of range of the enemy Secondary Battery. Most everyone will make it.

This process is repeated until the speed of the Ogre is 2. At this point, the fast-moving GEVs are immune to enemy Secondaries entirely. Casualties should fall off drastically. At some point, you must make a concentrated effort to reduce Ogre speed to 1. This will allow decent attacks by infantry and lengthen the game satisfactorily.

The Fuzzy Wuzzy technique is so effective that I believe there is no good Ogre reply. The Ogre can prolong matters by entering along the edge of the playing area (using the "Edge of the World" tactic familiar to most boardgamers), or by entering nearer the center, then lunging toward the board edge to trap any unwary defenders. In the end, however, the Ogre will fall. I haven't tested the scenario with two Mark III Ogres against an Advanced force. Theoretically it should be more balanced.



**Y**ou don't drive a GEV – you fly it. And the men who crew the GEVs are hot pilots, even if they never get more than a few feet off the ground. This evocative

story looks at an *Ogre* engagement from the point of view of a hover jock . . . all speed and gallantry, against the robot juggernaut.

# G.E.V.

by J. D. Bell

It was two hours before dark when the big show started in the north. On the clouds over the horizon you could see the reflected fireballs and even a few stray Hiveloc rounds burning up at the end of their range. The sound of the battle didn't carry over the distance, but you could feel the ground shocks through the suspension.

I began to worry. The operations officer hadn't mentioned any projected offensives, which meant only that he didn't know of any. And the rumor mills hadn't had any poop on any sort of dust-up. Now the north was alive with micronukes and Hivelocs. Somebody had guessed wrong.

"Mateland!" I was sitting on the forward glacis of my buggy, catching some fresh air, when the north lit up. I hammered at the hatch over the driver with the butt of my sidearm. "Mateland, heads up."

He poked his hat out of the hatch, blinking at the light. I could feel the hover tick over under me. "Trouble, Jake?"

"North."

He looked over that way, then turned back to me. "So?"

"I've got a feeling about that dust. Tell the troop to prep their buggies." I slid down and blew my nose clear. We'd gotten a dose of some Virus-IV about six months back that had left me with a constant cold.

"Copacetic, Jake, but if it's a zilch, you'll get a horse-laugh."

I slung my sidearms over my shoulder and walked towards some ruins to our left. I wanted to talk to the M1 topkick whose lot were bedded down with us. "Prep them, and tell the other troop they'd better get up, too. I'll worry about the laughter later." The ground was broken, dried up from the long summer, and churned to a powder from us and the Micks. The M1 had dug in between a smashed-up church and three Mick heavy tanks that we'd brewed up when we took the place about a month ago. The top was

standing out by the tank that had the three Micks melted into the armor. "What do you think, Sergeant?"

"Don't know, Captain." He was in his armor, towering over me by a half-meter between the BPC and his own long bones. "Heard anything?"

"Nothing. We're prepping the buggies, though." I looked to the north again. A flash lit up half the sky. "Word to the wise, I suppose. You need any small arms ammo?" He shook his head.

"We pick up any more armor?"

"We got eight hovers, six missile tanks, and that orphan heavy. That's all Sector Command left us when BEECH-V started."

He turned and looked at me from under his visor. His armor was a dirty, faded green, scarred here and there with field repairs. He was the oldest man of his platoon, just as I was the old man of the Buggies. We'd see our 21st year soon, if we were lucky. "I wonder," he said, looking back to the north, "just how bad they want our CP?" A roll of thunder, then a pressure wave passed over, plucking at my jumper.

"There's your answer!" I turned and doubled back to my hover. Mateland had the turbines hot and the hover buttoned down when I got back. I snaked through to the driver's cockpit and began strapping in. "Any dope come down yet?"

Mateland came on the line from the ECM station. "That wind was a ten-key nuke – Brigade says that the Micks have penetrated our front."

I grunted, buttoning down my hatch, then keyed into the Command network for situation reports. It wasn't good. According to the battlefield intelligence boys, the Micks had thrown about three battalions of armor into our MI, then gone to work on our main line of resistance. We were in for it. The situation was "fluid," meaning things were coming unstuck in a very unfunny way. "The troop mounted yet?"



"Yeah, everybody's on line and hot." More data came over the brigade link. I fed it into Mateland's screen. "MI drone reports an Ogre coming down the pike?"

"That's what Brigade said. Hope we don't see it." I strapped myself into the chair, watching my readouts come alive. My mouth was dry and I could feel the sweat under my skin-tights. I let my reflexes take over. I activated the computers, fed power to the gun turrets and tested all the circuits. Everything was up. "We're on line, Mateland. Maser the Old Man that we are go. Tell the troop to lift on my dust."

"Got you."

I idled the vanes for a minute, watching the digitals for hot spots or harmonics. I went to half-throttle, rocking us clear of the mud flat we'd bedded in a week ago. Dust billowed as small rocks clanged off the skirts. I put her in a neutral turn and checked out the rest of the troop. Gordy and Rosco were clear and skidding off to the sides to clear fire lines. Rube was still rocking his craft clean. He was my worry, a new boy. He'd come in with the last repple draft and I'd drawn him. New boys always worried me. They could be as deadly to a troop as the Micks.

"Lance to three, little more revs."

"Roger, Lance," Rube's hover broke clear. "Lifting."

"Roger that, take up thirds." He dropped back a bit, covering the rear and ready to bounce over us if needed. I completed the turn in time to see one of our GEVs come helling over the foothills to the north. It spun about and dropped to its springs. Two shockwaves rippled across the plains in front of me, then another buggy topped the ridge. It was a Mick by the turrets. Our gunner gave it a Hiveloc right under the main gun, point blank. The Mick flipped off the ridge line, then fireballed as the Hiveloc round vaporized in the turbines. Six clicks-a-second and the best armor will flow like wax.

Then the Ogre loomed over the hill and casually smoked the fleeing friendly with its main gun.

"Son of a bitch!" I poured power to the throttle, dumping thrust aft to slam us up to 150 knots. "Pucker up tight, troop." I cut into the command link. "Troop B, Lance advancing. Request release."

"Released, Lance; form on Alpha."

"Roger." I went to the troop link. "Lance to troop, form on Troop Alpha, arm micronukes." Our Hivelocs would smoke most normal armor, but not Ogres. That's what we carried the nuke rounds for.

"Jake, you wanna loose a drone?" Mateland had two scout drones ready. I thought about it for a second.

"No, that thing will have all sorts of ECM going by now. We'll just have to break close and eyeball it. Tell the major that we're going to see just how cherry it is."

"Okay." I heard him key into the command link. "Lance to troop –"

I dropped the link and revved the hover until I could hear slipstream in the cockpit. We were knocking along at about 200 knots, breaking clear of the pack that was converging on the Ogre. The thing was 4,000 meters away and it had filled the screen already. It had rolled

over the remains of the buggies and was coming right at us at 50 knots. We closed, a meter off the deck, running full out and dipping from side to side. I dumped thrust down and we bounced two meters into the air, skimming past the thing like a fly buzzing a rhino. Its guns snapped at us, but we were too close and too fast to register. I dropped her down on the other side and skidded about to face the monster again.

"It's cherry." Mateland had an odd tone to his voice.

"How cherry?"

"Off-the-bloody-tree cherry. Missiles, all its guns. I didn't spot a single track out of place. It's cherry!"

"Judas!" I got on the command link to the CP. "Troop B, Lance. Ogre is a Mark Three, undamaged. Missile armed." I swung about to rejoin the rest of the squadron when the Ogre swerved towards the skirmish line. "What's that thing doing – *Look out!*" The Ogre fired on the line of GEVs, smashing away with all its guns and missiles. Three fireballed, one simply fell apart under the guns. Another hover staggered off and grounded, its engine compartments shredded. "Missiles on hovers?"

"It got four of them," Mateland whispered into the mike. "Rosco's down, but he might slope off if we can distract it."

"Hang on." I dumped every pound of thrust I had aft. The other two surviving GEVs came slashing in behind me, trying to draw fire from the crippled one. The Ogre didn't even nibble. It fired its main battery and all the secondaries at Rosco. Nothing was left but a ten-meter crater.

"Lance to troop, form on me!" I led the hovers in. The missile tanks warned me they would salvo in about 90 seconds. I acknowledged and flashed past, hammering away at the main battery. Then the missiles landed, blanking out our screens. When they cleared, the main gun was only a burning sore on the face of the beast. Smoke billowed out of it and dribblets of molten BPC sparked off the treads. The Ogre lurched on, overrunning one of the missile tanks and scattering some MI that had tried to get the treads.

"In there again, register on the secondaries." We came screaming in again. The secondaries were blasting away, concentrating on our missile tanks. We slashed through the muzzle blasts, pouring fire into its turrets. One of my sponsors lost its liner and the rounds began to tumble as soon as they left the barrel. We had just cleared the target when the missile tanks landed another salvo. When the fireballs dimmed, two of the secondaries were gone, bubbling in their sockets, but two more missile tanks were brewed-up and a third was crippled. I pulled the GEVs clear, dropping into a gully about 500 meters away.

"Pull that barrel, now!" I told my gunner, then I tried to raise the CP. Mateland cut into the link before I could raise them.

"Jake, I'm picking up one hell of a signal –" The Ogre came over the lip of the gully, darkening the sky.

"Lift! Lift and scatter!" We took off, jumping the lip of the gully before the Ogre had time to cut us off. One of the other GEVs didn't clear the lip in time. We heard his guns hammer at the treads, then the Ogre ground him into the dirt.

"Who's left, Mateland?"

"Number three, Jake."

I flicked on the link. "Leader to three."

"Go ahead, leader."

"How's your ship?"

"Minor damage only, sir."

"Okay, stick tight." I dropped the link and laughed. It was my new boy. The one I thought I'd lose the first time we ran into the Micks. "He's getting one hell of a de-cherrying, eh, Mateland?"

"Yeah, but at least we know how the buggies get their fine young fools."

"Whatever. Let's hit that son of a bitch again." I boosted the power up to the red line and chased the beast down. Bits and chunks of equipment flashed by, MI lay strewn about mixed with fragments of track and armor. I jinked the hover to one side to avoid the hulk of the heavy tank, ground down to half its volume.

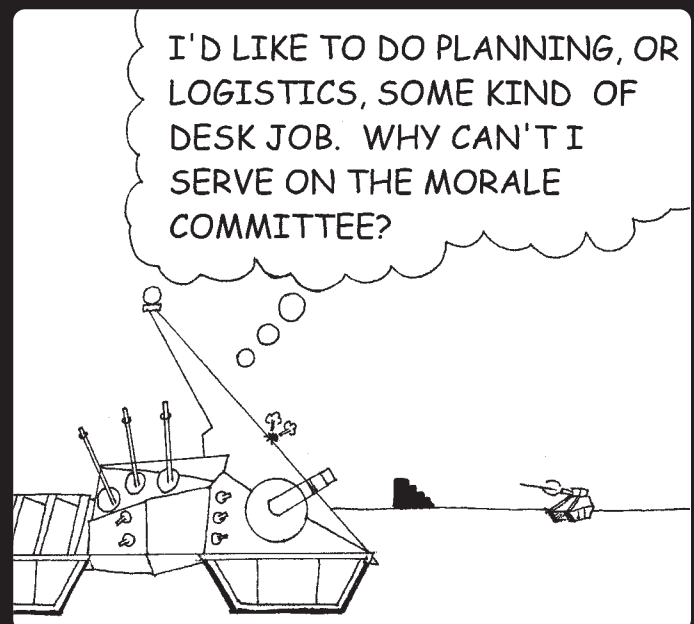
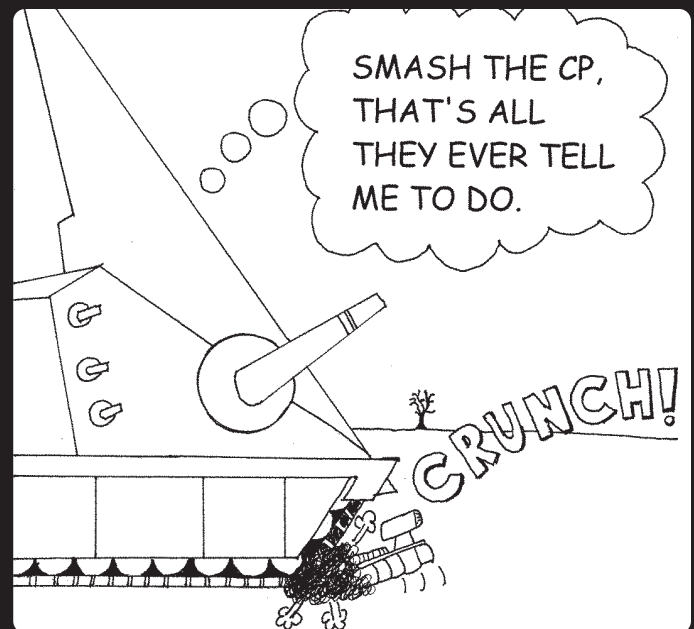
"Going in, Rube, on the secondaries." We flashed by again; the M1 small arms were bouncing off the BPC armor, tumbling in mad trajectories back into our path. Our own Hiveloc rounds were gouging half-meter square chunks out of the turrets. I got a flash of one MI clinging to a tread with a limpet bomb, then we were past and the missiles landed. The shock waves nearly tumbled us, but the last turret was dead.

It was too late. It was maybe five or six hundred meters from the CP. We hovered ten meters off the tracks, burning out our barrels with Hiveloc rounds. The MI threw themselves into the fires, ignoring both the Ogre's AP guns and our fire to slash at the treads. But that machine just kept coming. "*Bug out, bug out. It's going to overrun the CP!*" Men came scrambling out of the CP, diving into the light hovers and ATVs. The half squad of MI on the roof emptied their missile packs at the treads and then bounced away. Then the Ogre did a graceful turn on the CP. It had won, but before it could lurch 15 meters away from the rubble, we smashed one of the boggy assemblies. It could no longer move. "Okay, MI disengage. Hunt for survivors. Armor close in. Strip that damned machine!" I leaned back in my chair.

Sunset brought darkness except for the molten-glowing Ogre and slender moon. With Brigade CP gone, the entire sector was without a coordinator. If they hit us anytime soon, we'd crumble like a dirt clod in a rainstorm.

"Mateland, contact HQ. Tell them we're untenable. Tell them we just had a waltz with an Ogre and it stomped our tail. Tell them we got nothing left and we're evacuating right now. Don't take no for an answer."

I looked at the TO list. It was littered with KIAs and MIAs. "Hell, I don't care what you tell them. We've had enough."



- Andrew Walters

**G.E.V.** brought new complexity. Now both sides could maneuver large numbers of units over a variety of terrain. The tactical value of each unit type had to be assessed, not just against Ogres, but against every other unit type in a variety of situations.

My big disagreement with this article is that, in my opinion, it neglects the value of the howitzer/infantry combination for defense. A screen of infantry, protecting the howitzer and protected by it in turn, can be a very tough nut

to crack. And backing up such a screen is a good defensive role for hovercraft. If you have a “crust” defense, you need a mobile reserve to deal with breakthroughs, and nothing is more mobile than the GEV (though the same point value in light tanks will work better if the area to be covered is small). See “Appointment with Glory” (p. 71) for an exercise in exactly this tactic.

Be that as it may, here’s a good common-sense analysis of the defender’s situation. It will improve your game.

# DEFENSIVE TACTICS AND STRATEGY IN G.E.V.

By Tim Solis

Friends, are you tired, listless, and worn out at the prospect of being the defensive player in *G.E.V.*? Do you think of yourself as Poland being invaded by Germany, or Pearl Harbor waiting for the inevitable surprise attack by the Imperial Japanese Air Force? Do you feel doomed to play the part of Napoleon at Waterloo? If the answer to some or all of these questions is a resounding yes, then this article may be just the thing you need (besides a good shrink to get rid of that weird inferiority complex).

## TACTICS

Terrain plays a significant role in warfare, especially in defense. By examining the terrain and placing your units accordingly, it is possible to route the enemy’s units to areas where you are ready’ and waiting. For example, in the “Breakthrough” scenario, note the terrain at the northern edge of the *G.E.V.* map. The swamp and forest hexes are obstacles to most types of vehicles, especially GEVs. The most favorable terrain is the road hexes, and, after that, the clear hexes. Therefore, in situations involving a time element, the enemy will try to take the path of least resistance. Figure 1 shows the three most direct paths to the northern edge of the board. For this reason, you should block these paths and ignore the swamp and forest hexes. This will force the Combine player to do one of three things: 1) Send his GEVs through the forest. 2) Attempt to clear

away Paneuropean forces from one or more of the direct paths. 3) Split his forces and attempt to do both.

## UNIT TYPES

The types of units chosen should be considered carefully since some of them can’t be used as effectively as others. Let’s look at the units in *G.E.V.* and their capabilities for defense:

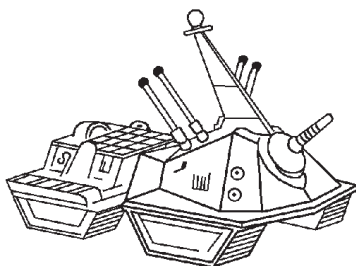
**Infantry:** Since the advent of the tank, the infantry is no longer regarded as the “queen of battle.” However, they are still valuable to take and/or hold objectives: bridges, towns, roads, or what have you.

**Light Tank:** Sometimes underrated, this vehicle can prove to be a blessing. As defender, you never have enough units, but you can get two light tanks for the price of one heavy tank.

**Missile Tank:** This weapon has a good range and moderate firepower. It can be used quite effectively in a defensive role because of its four-hex range.

**Heavy Tank:** This vehicle is always good to block really tough areas where you suspect a breakthrough will take place, and as a general utility weapon.

**Ground Effect Vehicle:** At first glance this might seem a logical choice – fighting fire with fire. However, the primary advantage of a GEV is its speed, which you just don’t need. Time works to your advantage, so GEVs





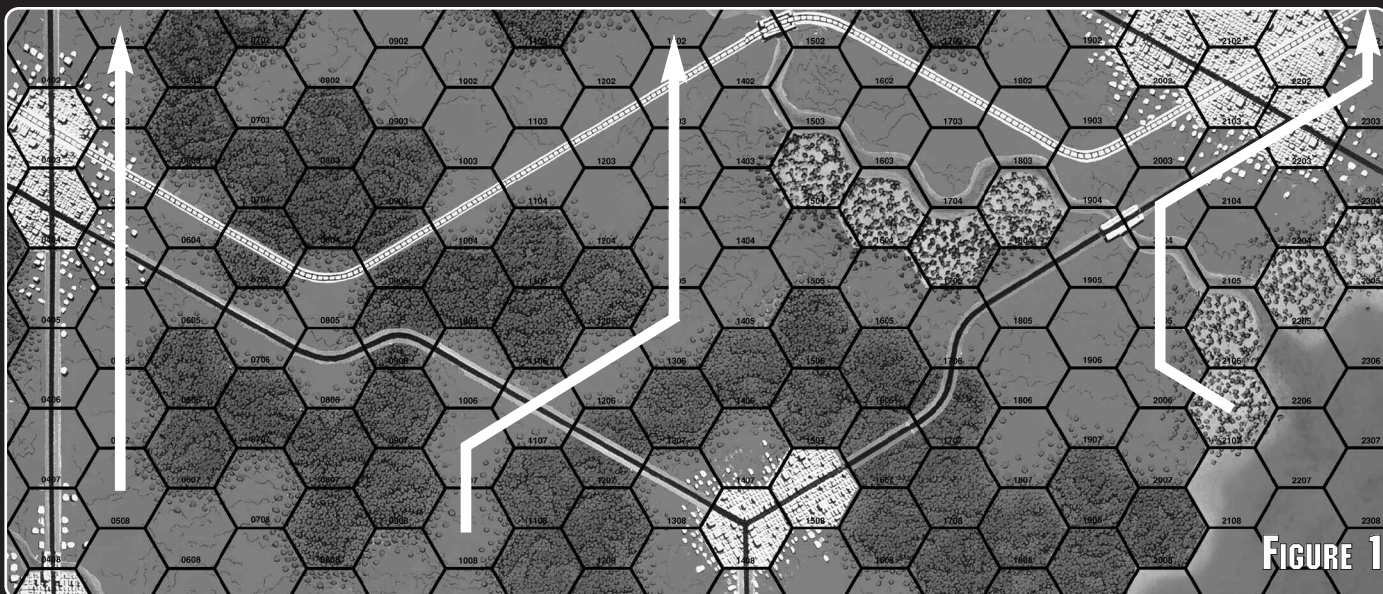


FIGURE 1

should be left to the offensives or for special situations (e.g., an Ogre attack).

**Mobile Howitzer:** This vehicle has a good range and firepower but its cost and movement rule it out as a purely defensive weapon.

**Howitzer:** This weapon fails the defensive criteria for the same reason as the mobile howitzer.

## STRATEGY

There are basically two schools of thought on a game of this type when it comes to defense. One of them is the continuous front theory, in which the breakthrough problem is dealt with by creation of an uninterrupted line of units from one edge of the map to the other. This prevents the enemy from outflanking your forces. A continuous front not only puts a strain on the small number of forces

you have, but when a breakthrough does occur, the parts of the line that remain intact will be spread so thin that catching up to the enemy will be almost impossible. This is not to say that this type of defense should be discarded altogether, but rather that it isn't suitable for defense on such a large scale without reinforcements.

The other type of strategy is the mobile defense, which does not seek to stop the breakthrough, but instead attempts to delay it for as long as possible. Let's face it, in three of the scenarios that's all they're asking you to do. In "Breakthrough," all you have to do is stop the GEVs from getting off the board for so many turns. In "Raid," you must prevent the enemy from completing his objectives until enough reinforcements arrive to push him back, and in "The Train," you must stop the enemy from destroying the train/tracks until the train has gotten safely through.

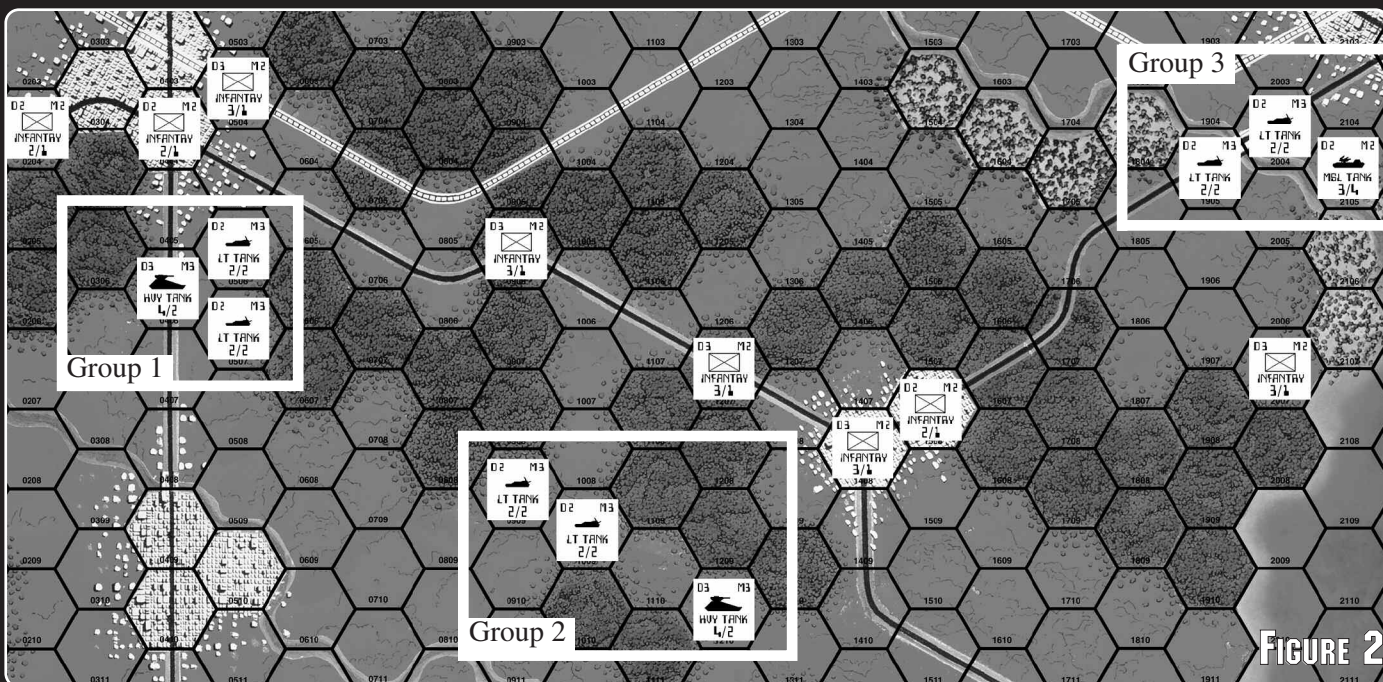


FIGURE 2



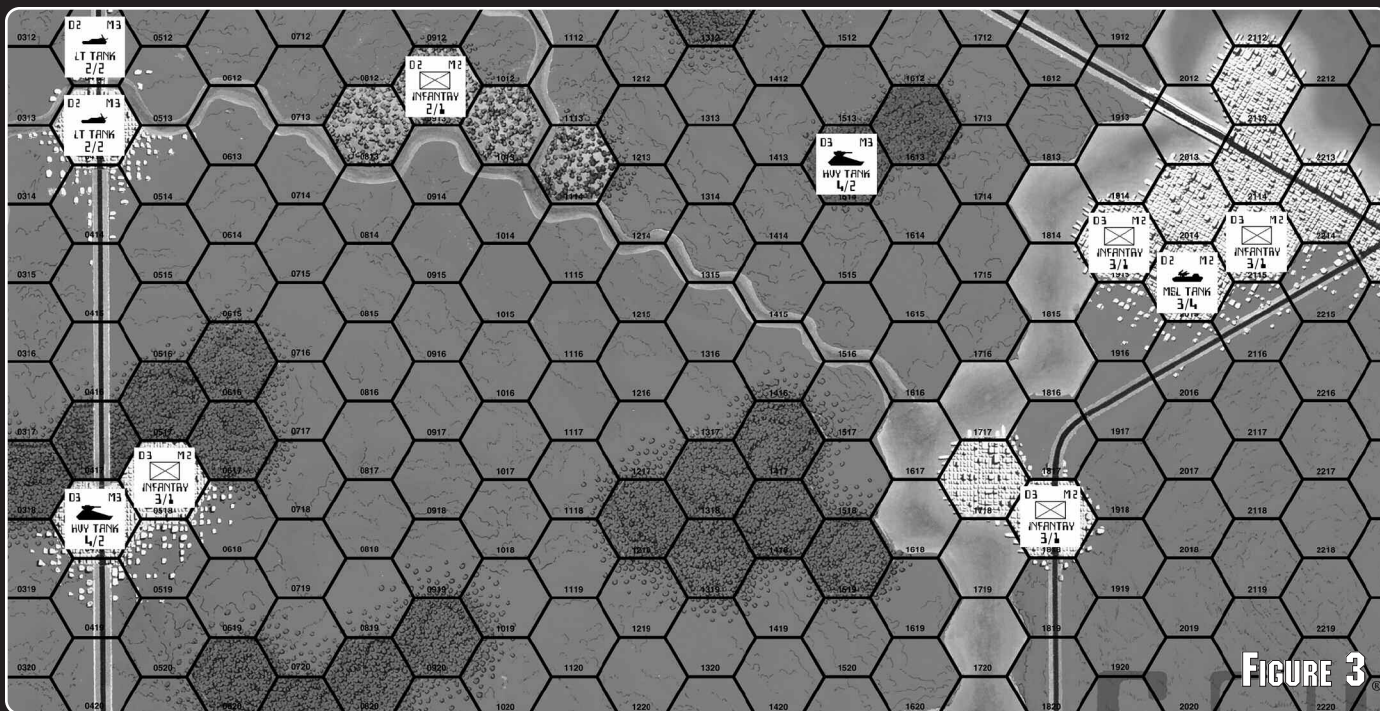
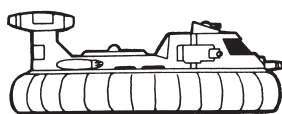


FIGURE 3

Just because you're playing a defensive role doesn't mean you have to sit there and wait for the Combine player to attack. Figure 2 shows the Paneuropean player's first move. The 2/1 infantry at hex 0204 will take care of any GEVs that attempt to enter the forest hexes south of it. Tank Group 1 is blocking the western path. Tank Group 2 guards the center path. Note that both Tank Groups are out of firing range for any GEVs that are south of the stream running from hex 0107 to the river, since most vehicles are required to stop at stream hexes and wait until the next turn to cross. This also gives both Tank Groups the opportunity to move out of their defensive positions to attack GEVs that are planning to cross the stream on their next turn. The infantry units north of Tank Group 1 form a secondary line of defense to block the western path. The eastern path is defended by Tank Group 3. A 3/1 infantry unit is positioned to block the only clear hex in the area. The missile tank was included in this group to destroy or disable a few GEVs before they can make it to the shore.

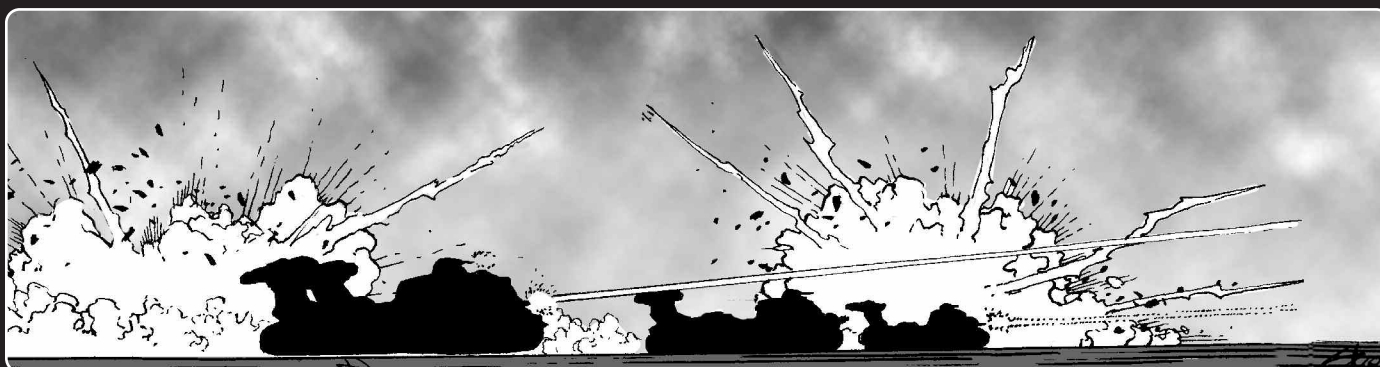


Infantry units on road hexes are used as reinforcements and to block movement of GEVs.

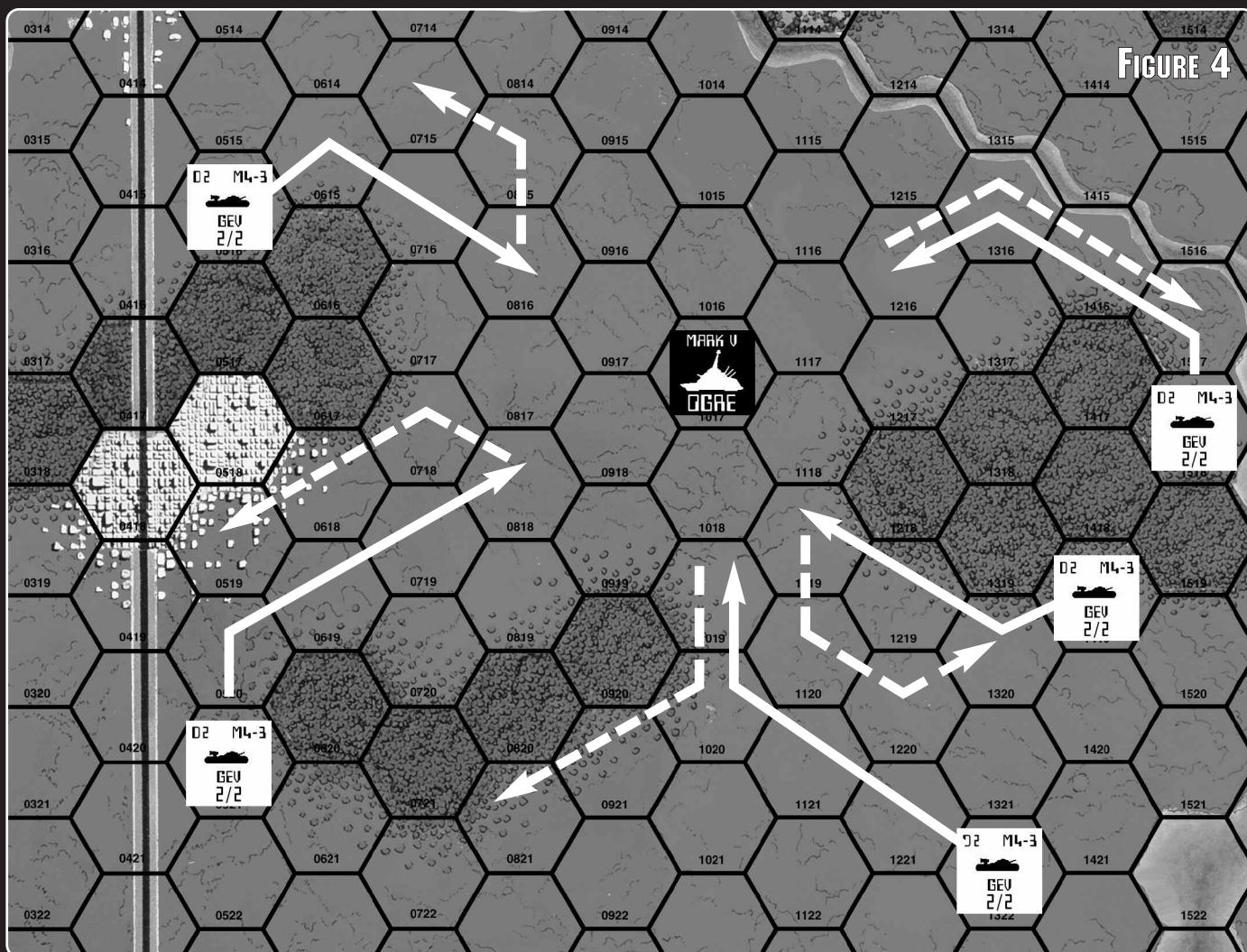
The "Raid" defensive setup might look something like Figure 3. Since the Alpha CP is worth a fat 25 points to the Combine player, it is wise to put it someplace far from the enemy and close to a reinforcement point. CP Beta should be placed on the northern edge of the map-board. The reason for this is to draw off some of the Combine units and tie them up so they can't be used for destroying bridges, cities, etc.

## OGRES

To defend against an Ogre attack requires a change in the game plan. What makes an Ogre so tough to stop is that every time you knock off a few treads, it ends up creaming your forces on its turn. To minimize its ability to destroy your units, you will need weapons that have a moderate to long range capability to destroy the missile racks and main battery. After these weapons are destroyed, you should try for the treads. Figure 4 shows an attack on







an Ogre with five GEVs. The solid line starts at the hexes the GEVs occupied prior to movement. The dotted line traces the movement of the GEVs after they have made their attack (second movement phase). By using their second movement phase in this way, the GEVs function in much the same way as a moderately-ranged weapon. Notice that the GEVs scatter in different directions, which places the Combine player on the horns of a dilemma: Should he move the Ogre toward its objective and possibly suffer another attack by the GEVs, or lose valuable time by pursuing them?

When you are the defensive player it is important to:

- 1) Analyze the terrain and use it to your advantage.
- 2) Pick the types of units best suited to a defensive posture.
- 3) Choose a defensive strategy that is compatible with the victory conditions.
- 4) When an Ogre scenario is used, the primary targets should be the missile racks and the main battery. After these targets are neutralized, the treads should become the final target.

I hope this article has done some good. I sincerely believe that if you follow the logic used to find advantages and disadvantages, you will become a better player, both in offense and defense.





**A**lthough the *Ogre* combat results table is simple (only one 6-sided die!) it has spawned a great many arguments. Is it better to divide up your attacks into a lot of

low-odds shots, or to stack them up for a few sure kills? Well, it depends on what you're trying to achieve . . .

## PLAYING THE ODDS IN OGRE/G.E.V.

By Roland Parenteau

From the first time you play *Ogre* or *G.E.V.*, you know they're games in which you get to throw the dice *a lot*. A newcomer to wargaming might think any game in which you throw the dice so much is ruled by luck. The judgment is understandable, but not true.

In fact, *Ogre* and *G.E.V.* are less ruled by chance than many other games that rely on dice for combat. The law of averages favors the evening-out of die rolls over the course of any game.

This does *not* mean bad throws early in a game are likely to be followed by good throws later. It merely indicates that games with a high number of die rolls will have a higher likelihood of giving each player equal treatment than games in which the die is rolled only a few times.

All this means two things for the wargamer: 1) Except in rare cases, the player who plays most skillfully *will* win; and 2) A player who can use probabilities better than his opponent will have a substantial advantage in the long run.

*Ogre* and *G.E.V.* give a player ample opportunity to use his knowledge of probabilities. Take the common problem of how to allocate attacks to inflict

the maximum expected damage on an enemy. For example, a player is often faced with the decision whether to attack an enemy unit with one 2-1 attack, or to attack the same target twice (with different units, of course) at 1-1 each. Which is better?

The answer is two 1-1 shots. How do you figure? Let's go over the procedure.

On a sheet of paper, list the 36 combinations in which two dice can be thrown (1/1, 1/2, . . . 6/6). For each combination, pretend that each number is a die roll resolving a 1-1 attack, and write down the result of two combined 1-1 attacks on the unit. (For the sake of argument, let's suppose the target is an armored, non-Ogre unit.)

The combination 1/1, therefore, would have an effect of NE, while a 3/4 combination would have an X effect. (The 3 would give a D result, and the 4 would give another D result to destroy the already disabled unit.)

Follow this procedure for armored units, then repeat it for infantry units and again for Ogres, remembering the different handling of D combat results for each



unit type (infantry units are not disabled by D results, but simply lose one step – Ogres ignore D results altogether). When you are finished, add up the number of X, D, and NE results.

What you find may surprise you. While a single 2-1 attack against an armored unit gives a 50% chance of X, a 33% chance of D, and a 17% chance of NE, two 1-1 attacks give a 67% chance of X, a 22% chance of D, and only an 11% chance of an NE result. That means two 1-1 attacks have a better chance of destroying the unit outright than a 2-1 attack, and less chance of missing.

Results with other units are almost as favorable. With infantry as the target, two 1-1 attacks give a 56% chance of X, an 11% chance of two Ds, a 22% chance of obtaining a single D, and an 11% chance of NE. Against an Ogre, two 1-1 attacks have a 55% chance of an X, compared to a 50% chance with the 2-1 attack alone.

Even these numbers do not tell the whole story. Splitting the 2-1 attack into two 1-1s gives the attacker a chance to destroy the target with the first shot, thereby saving some firepower for another target. Against infantry units, there is also the possibility of obtaining two consecutive D results, reducing a target unit from a “3” to a “1.”

After obtaining these interesting results I investigated some other possible combinations. The results are shown below.

Keep in mind that the percentages given in the table are the chances of obtaining a particular result on a given target for the overall combination of attacks, or for the single attack to which the combination is compared. In

conducting several attacks, there is always the possibility that an X result will be obtained on an early shot. This must be considered, along with the urgency of your position, in apportioning the attacks.

It can be shown that, in combinations of attacks involving two different odds (i.e., 2-1 and 1-1 vs. 3-1), the order of attacks makes no difference; the chances of obtaining X, D, and NE results remain exactly the same.

Assessments of the effectiveness of each combination attack in place of the comparable single attack follow.

Two 1-1s vs. one 2-1: Two 1-1 attacks are equal or better in every instance.

Two 1-2s vs. one 1-1: The two 1-2 attacks come close, but are slightly less favorable than the single 1-1 attack.

Two 2-1s vs. one 4-1: Percentages favor the 4-1, but not by much. The big difference is that two 2-1s give you a small chance of missing entirely, whereas the 4-1 gives you none. Two 2-1s would be an intelligent choice where you want to economize firepower.

1-2 and 1-1 vs. 2-1: The 2-1 is better.

2-1 and 1-1 vs. 3-1: If the target is an armored unit, you are better off spreading out the attack. If the target is an infantry or Ogre unit, the 3-1 attack is better.

Three 1-1s vs. one 3-1: If the target is armor or infantry, three 1-1s are definitely better. If the target is an Ogre, the 3-1 is just slightly better – but since two 1-1 shots give nearly a 50% chance of destroying the target, three 1-1s might still be an attractive option.

Three 1-2s vs. one 2-1: The 2-1 is better.

## CHANCE (%) OF OBTAINING GIVEN RESULT THROUGH ATTACK COMBINATIONS AND SINGLE ATTACKS

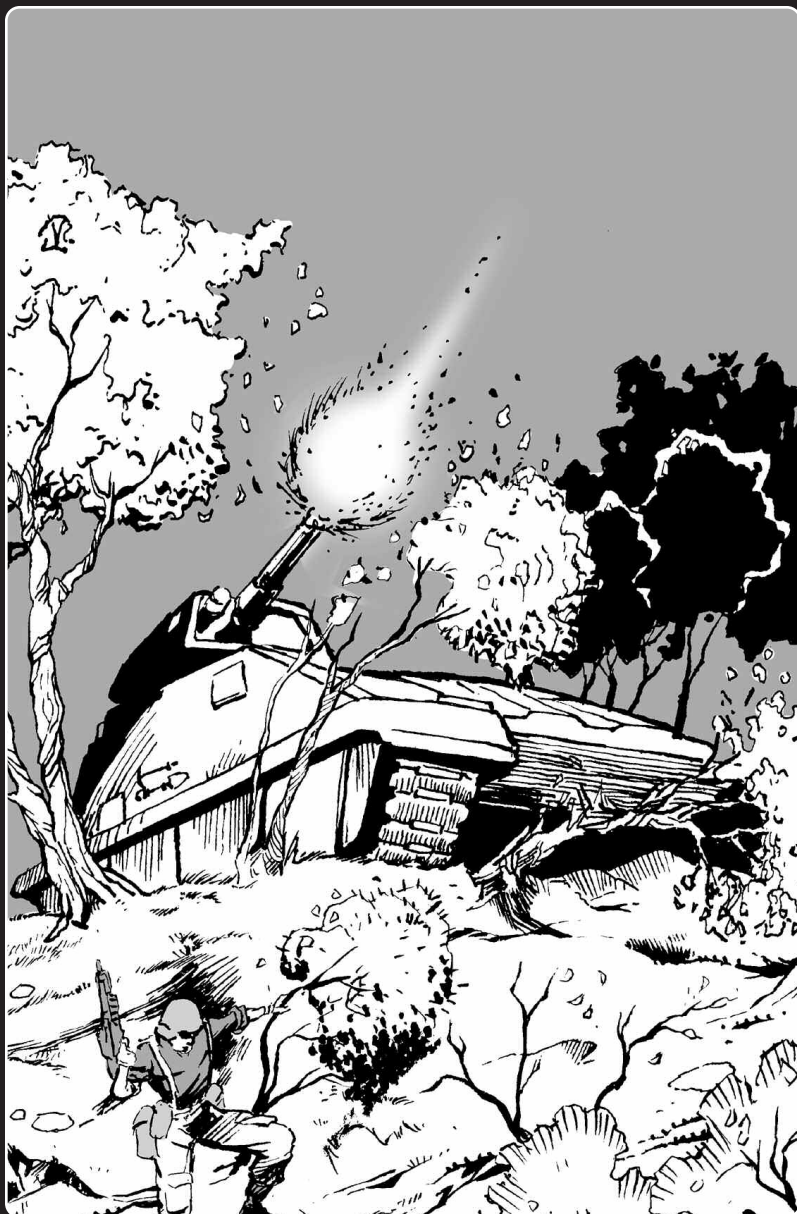
| Target is:           | Armor |    |    | Infantry |    |    |    | Ogre |    |
|----------------------|-------|----|----|----------|----|----|----|------|----|
|                      | X     | D  | NE | X        | -2 | -1 | NE | X    | NE |
| <i>Two 1-1s</i>      | 67    | 22 | 11 | 56       | 11 | 22 | 11 | 56   | 44 |
| <i>vs. one 2-1</i>   | 50    | 33 | 17 | 50       | 0  | 33 | 17 | 50   | 50 |
| <i>Two 1-2s</i>      | 33    | 22 | 44 | 31       | 3  | 22 | 44 | 31   | 69 |
| <i>vs. one 1-1</i>   | 33    | 33 | 33 | 33       | 0  | 33 | 33 | 33   | 67 |
| <i>Two 2-1s</i>      | 86    | 11 | 3  | 75       | 11 | 11 | 3  | 75   | 25 |
| <i>vs. one 4-1</i>   | 83    | 17 | 0  | 83       | 0  | 17 | 0  | 83   | 17 |
| <i>1-2 &amp; 1-1</i> | 50    | 28 | 22 | 44       | 6  | 28 | 22 | 44   | 56 |
| <i>vs. one 2-1</i>   | 50    | 33 | 17 | 50       | 0  | 33 | 17 | 50   | 50 |
| <i>1-1 &amp; 2-1</i> | 78    | 17 | 6  | 67       | 11 | 17 | 6  | 50   | 50 |
| <i>vs. one 3-1</i>   | 67    | 33 | 0  | 67       | 0  | 33 | 0  | 67   | 33 |
| <i>Three 1-1s</i>    | 85    | 11 | 4  | 74       | 11 | 11 | 4  | 65   | 35 |
| <i>vs. one 3-1</i>   | 67    | 33 | 0  | 67       | 0  | 33 | 0  | 67   | 33 |
| <i>Three 1-2s</i>    | 48    | 22 | 30 | 43       | 6  | 22 | 30 | 42   | 58 |
| <i>vs. one 2-1</i>   | 50    | 33 | 17 | 50       | 0  | 33 | 17 | 50   | 50 |

A great little idea . . . not even submitted as an article, but as a letter to the editor, which appeared in *Space Gamer* 17 in mid-1978. Think how easy this would be now to add to a computer game!

Note that his option 10 predicted a couple of special cybertank types that didn't (yet) exist. The "Espionogre" would, of course, be an Ogre Ninja, and the "Ogrecovery" vehicle would be a Vulcan!

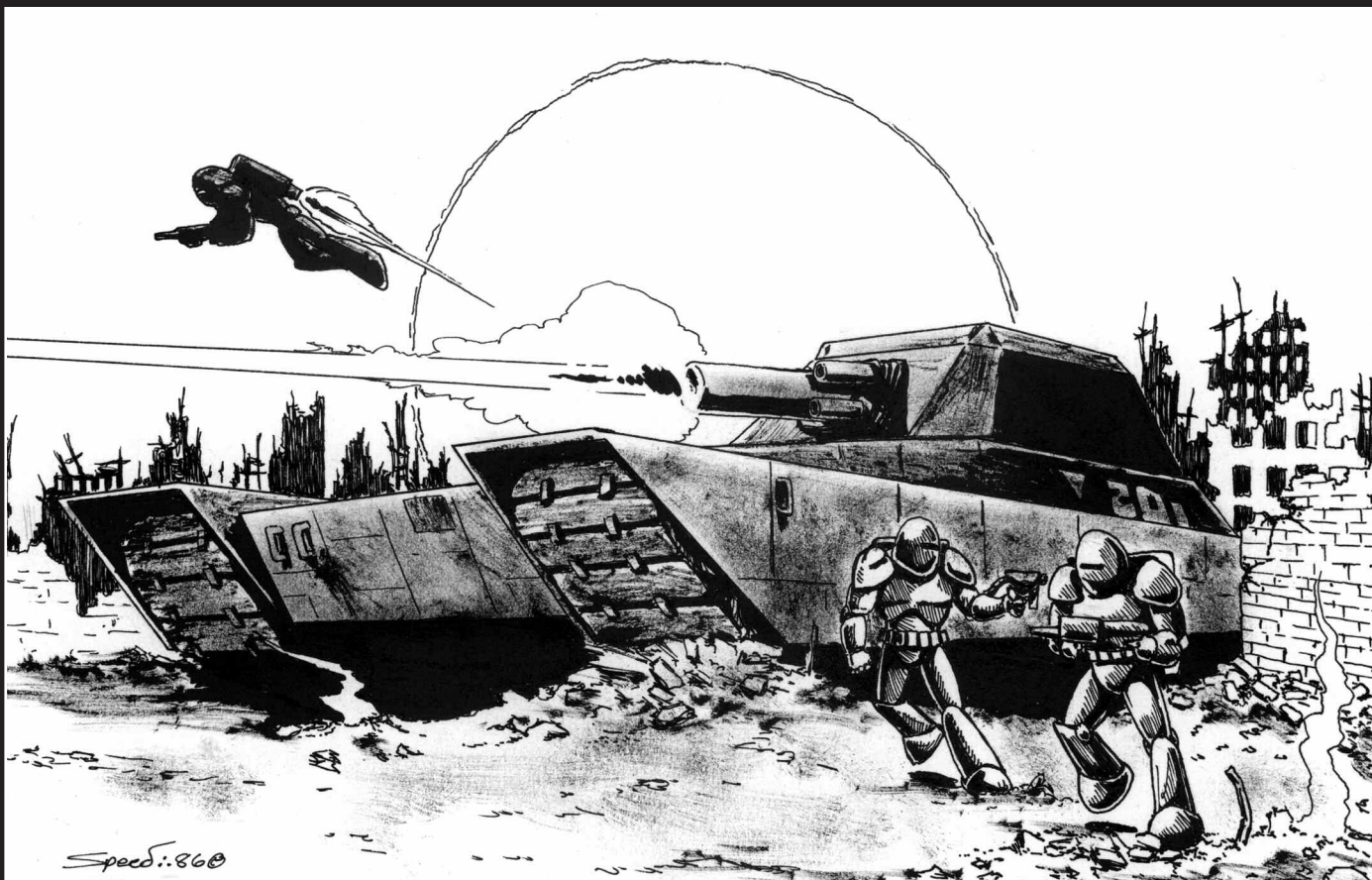
# YOUR MISSION, SHOULD YOU DECIDE TO ACCEPT IT . . .

By John Howard Oxley



I consider *Ogre/G.E.V.* the best idea you have had in ages, and would like to make a suggestion about it. It seems to me to have excellent possibilities as a three/multi-player game. The basic format would be this: each player would have a deck of shuffled mission cards, which would detail his specific mission, the force level available to him, and the VP value of his mission. At the beginning of the game, each player would draw a mission card, inspect it, and then decide to accept the mission or decline it (placing the card in an envelope secretly, or noting his decision on scratch paper, or some similar means). If he declines the mission, then his objective becomes (using the forces given to him on the mission card) to prevent the other players from completing their missions. For each player's mission the declining player frustrates, the declining player is awarded the VP for that mission. If all the players decline, then victory is settled by some casualty counting method. In all cases, the players have dummies as well as effective pieces, and no piece is revealed until it engages in combat. Of course, if the player accepts his mission, then he must carry it out. This does not prevent him from frustrating other players' missions as well, but in this case, no VP are given for frustrated missions. It seems to me that with the right balancing factors, you would have a multi-player game that would be filled with bluff, counter-bluff, and exciting action. (The question of whether to allow alliances and diplomacy, e.g., partial revelation of missions between players in exchange for help, etc., is a design point that you will have to consider.)





I envisage each player's card pile from which he draws missions to be of 30 to 45 cards, containing a mixture of missions based on three force levels: weak, standard, and strong, differentiated by percentiles of about 30. Naturally, a mission completed with a weak force would be worth more VP than the same mission completed with a strong force. A non-exhaustive list of possible missions includes:

- 1) Exit the board (with specified forces – several levels possible).
- 2) Exit the board and hold a "supply" corridor to the exit point.
- 3) Take one geographic objective.
- 4) Take two (or more) geographic objectives.
- 5) Preserve a specific force level at the end of the game.
- 6) Destroy all the units belonging to Player A.
- 7) Destroy all the units belonging to Player B (C, etc.)
- 8) Destroy all the units of all enemy players.
- 9) Identify all real enemy units on the board, and have at least one unit capable of exiting the board to pass the information along.
- 10) An *Espiongre* has been nuked into immobility at location X. It has dug itself in and camouflaged itself against enemy players. You must get to location X with an *Ogrecovery* vehicle (has all Ogre characteristics except primary, secondary, and missile armament, and repairs the immobilized Ogre into full mobility by spending 3 turns unmoving in an adjacent hex), and recover the *Espiongre* off your end of the board.

11) Escort a soil sample machine to one or more specified locations to obtain tactical data, then recover it safely.

12) Shield combat engineers building a specific emplacement (this could vary in type and time needed) at a specific location on the board. Completing the installation gives VP.

13) Raid the HQ unit of a specific player.

14) Allow an Ogre to draw fire from one of each type of unit the enemy player (specified) deploys, then withdraw the Ogre from the board to allow damage analysis.

15) Carry a special weapon (nerve or psychogenic gas, bacterial weapon, etc.) to a specified place for release against a specified enemy.

Actually, that mission list with three different force levels gives 45 mission variants right there.

In addition, it might be neat to give slightly different combat capabilities to each player (e.g., one player might have Fencers, another only Mk Vs, and so on). This differentiation would extend to the other units as well.

Well, that's my idea. With a little development it might make a fun 3/multiplayer game. Far too many multiplayer games (e.g., *Diplomacy*) are really not optimized for 3 players, while far too many 3-player games (*Battle for Germany*, *Invasion: America*) involve two (weaker) players ganging up on one (stronger) one, and that is not always a good thing. This idea for multiplayer *Ogre* seems to me to avoid both difficulties.

This is still one of the most talked-about articles ever written for *Ogre*. Not everyone can make the four-howitzer defense work, but it's a valid strategy, and

played successfully, it can be hugely annoying to an opponent who didn't believe Howitzers were worthwhile . . . let alone *four* of them . . .

# THE FOUR HOWITZER DEFENSE IN OGRE

By Chester Hendrix

Not many *Ogre* players like the Howitzer. That's a shame, because the Howitzer, when properly placed and used, can be a devastating part of your defensive style, especially in the Basic Game scenario against the Mark III Ogre. The problem is that most players don't use the Howitzer correctly.

When first playing *Ogre*, the average newcomer will grab one or two Howitzers. He usually does this for two reasons: 1) the obvious firepower and range, and 2) because taking more than one or two Howitzers will limit the amount of mobile armor units left for maneuvering around the Ogre. After a few bad experiences of not being able to get a hit with the Howitzers, or having them overrun without getting off more than a few shots – if any – the Howitzer quickly becomes the most unused unit in the game.

Admittedly, there is a basic problem with the Howitzer. In utilizing only one or two Howitzers, you are left with the very real possibility that you may not get a shot before your position is overrun or wiped out. Since it can't move, a Howitzer must have effective support fire, or it will have a very short life once the Ogre comes within two or three hexes.

The key is in using three or four (preferably four) Howitzers and placing them so their crossfire is at once heavily concentrated *and* mutually supportive. Now, before any one Howitzer can be attacked the Ogre will have to undergo fire from the remaining Howitzers.

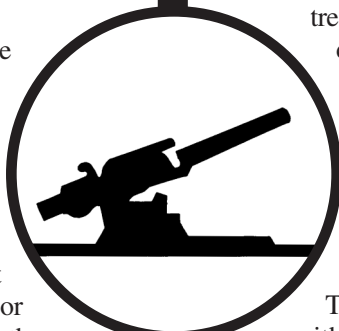
Your defense should revolve around defending the Howitzers first, and worrying about the Command Post later. I have found the best way to do this is to have your mobile ground forces throw everything in the first attacks at the Ogre's main battery. Any units left over should then go for the missiles if 2:1 odds or better can be achieved. Otherwise, hit the treads with any unused attack factors.

If the Ogre retains its missiles, they must be the next target. The reason for initial attacks on the main battery is to provide ground units (and later the Howitzers) more protection by limiting the range of the Ogre. Always channel extra attack factors into hits on the treads. Every tread you hit means more turns to slow the Ogre down once he's within range of your Howitzers. This won't matter much if he still has his main battery and missiles intact.

Placement of the Howitzers for maximum coverage and mutual support fire is crucial to your set up. The positions of the Howitzers in the diagram at hexes 1506, 1007, 0904, and 0706 give you this effect. The Ogre cannot reach any Howitzer – except with missiles – without undergoing fire from at least three Howitzers for one turn. This is assuming the worst – the Ogre still has his full three movement factors. The less movement the Ogre has left, the greater the mutual support capability.

You will notice each hex in the diagram is screened to show how many Howitzers can fire into each hex. The greatest concentration is closest to the Command Post, making it dangerous for the Ogre to get close until all Howitzers are taken out. This costs him valuable turns which can make the difference in a win or lose situation later on.

The Command Post should be positioned at hex 1401 in the northeast corner. (I was somewhat surprised when the gamer who introduced me to *Ogre* flipped when I showed him this Command Post placement. It had never occurred to him to place it anywhere but 0801 or 1001.) With the Command Post in the corner, the Ogre can attack more than one of the Howitzers (at 1506 and 1007) by advancing along the east edge of the map – the shortest route to the CP – if the missiles are still functional. By going west a couple of hexes (via 1308 or 1307) the Ogre





can still take out both of these Howitzers even if its missiles are both gone, as long as the main battery is still intact. This is the real reason for knocking out the main battery and missiles.

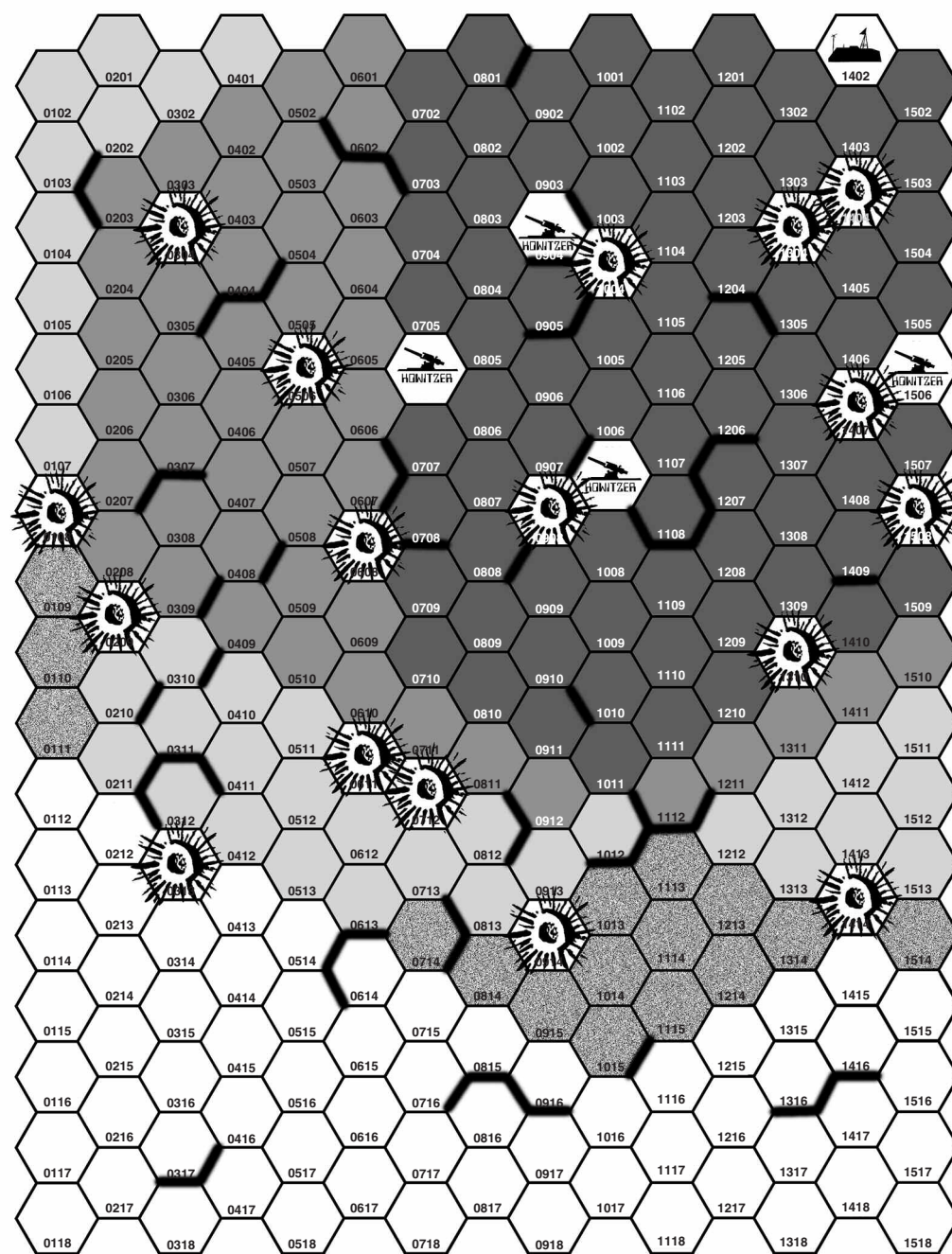
If the Ogre has progressed along the east edge and you have knocked out the main battery and missiles, your opponent must make a quick decision. A competent defensive player will have taken out the Ogre's main offensive powers and reduced the treads by one movement factor, giving the Ogre two choices.

1) Rush the Command Post. This leaves him vulnerable to the remaining Howitzers.

2) Drive on the Howitzers. This wastes precious time which is needed to reach the CP and allows any surviving mobile defensive forces an excellent opportunity to stop him.

This basic strategy of setting up four Howitzers can be very effective in improving your defensive game. The element of surprise in opting for an unconventional force against a conventional player should not be minimized.

To summarize: After placement of the Howitzers, the first objectives are the main battery, missiles and treads, in that order. At this point, you can sit back and let the Ogre sweat. Your main worry will be letting your troops be drawn out into the open and destroyed, leaving your Howitzers for defense. If the Ogre hasn't been reduced in offensive firepower and/or movement points, and this happens, you could be in trouble. But that's all right – you knew the job was dangerous when you took it.



## KEY:

*The shaded areas represent the number of Howitzers able to fire into any given hex.*

  
4 HOWITZERS

  
3 HOWITZERS

  
2 HOWITZERS

  
1 HOWITZER



In 1977, when this was written, Greg Costikyan was a fairly new member of the SPI design staff (though he'd already paid a couple of years' dues there, working in game assembly). Now he's a successful science fiction/fantasy novelist and computer game designer, and the Origins-Award-winning creator of *Paranoia*. Cool . . .

This variant is definitely *not* canon. One of the important features of the *Ogre* universe is that air power *isn't*.

Aircraft are such soft, easy targets that they're no longer cost-effective. Nevertheless, Greg's monstrous flying Ogres are fun.

Greg's title is a nod to Keith Laumer's *Bolo* stories, which feature monstrous "Continental Siege Units" that would dwarf even Ogres. And the "Ogre Magi" name, of course, is a *D&D* reference . . .

# CONTINENTAL SIEGE AIRCRAFT

By Greg Costikyan

## 10.0 INTRODUCTION

"Continental Siege Aircraft" is a variant of *Ogre* adding bombers, fighters, antiaircraft units, and the airborne equivalent of Ogres to the game.

## 11.0 AIRCRAFT

**11.01** This rules section deals with the rules common to all aircraft. The following three sections deal with the individual aircraft types, and the last deals with antiaircraft units.

**11.02** When the players choose to play one of the standard scenarios using air rules, bombers, fighters, and AA units are all considered to be armor for point purposes. The strengths of bombers and fighters are given below.

|                                                                                     |    |                                                                                     |    |                                                                                     |    |                                                                                     |    |                                                                                     |    |                                                                                     |    |
|-------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------|----|
| D3                                                                                  | MS | D3                                                                                  | MS | D3                                                                                  | MS | D4                                                                                  | ME | D4                                                                                  | ME | D4                                                                                  | ME |
|  |    |  |    |  |    |  |    |  |    |  |    |
| BOMBER                                                                              |    | BOMBER                                                                              |    | BOMBER                                                                              |    | FIGHTER                                                                             |    | FIGHTER                                                                             |    | FIGHTER                                                                             |    |
| 6/0                                                                                 |    | 6/0                                                                                 |    | 6/0                                                                                 |    | 4/3                                                                                 |    | 4/3                                                                                 |    | 4/3                                                                                 |    |

PERMISSION IS GRANTED TO PHOTOCOPY THESE COUNTERS.

**11.03** At the beginning of a game, all aircraft enter from an edge of the map. Which map edge an aircraft enters on is determined by the initial positions of the owning player's units. Thus, in a straightforward, defense vs. Ogre scenario, any aircraft would enter on the defender's map edge, and so on.

**11.04** Aircraft move in a manner different from normal units. Firstly, aircraft are considered to face towards a single hex juncture (see illustration, below). A hex

junction is defined as the point at which two sides of a hex intersect. The "nose" of an aircraft counter must always be set pointing towards a single hex juncture.

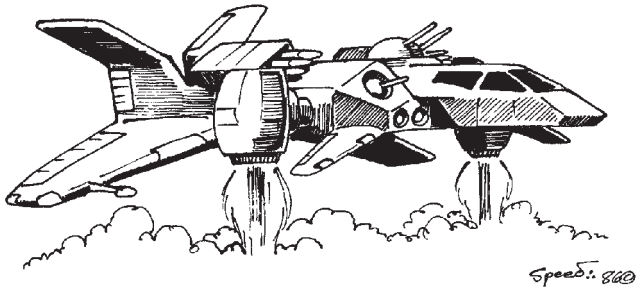
**11.041** When an aircraft moves, it must move into one of the two hexes to its front. The aircraft must determine which of the two hexes it will move into every time it moves a single hex. For instance, an aircraft starting in hex 0508 pointing towards the hex juncture formed by hexes 0507 and 0407 could move to either of those hexes (0507 or 0407). If, for instance, it moves to 0407, it could then move either to 0406 or 0307, and so forth. The players should note that this rule essentially means that an aircraft can move to any hex in a 60-degree arc to its front.

**11.042** At the end of an aircraft's movement, i.e., after it has expended all its movement points, it may change its facing by one hex juncture. That is to say, it may change its facing from one hex juncture to one of the two adjacent hex junctures. In the illustration below, the aircraft could change its facing from C to either A or B – or, for that matter, leave it at C.

**11.05** Aircraft may ignore terrain. They may freely move through crater hexes and rubble hexsides.

**11.06** Aircraft may freely move through hexes containing other units and stack with other units. Note that this is an exception to rule 5.02, which states that no unit may end its movement in the same hex as any other unit. Aircraft may end their movement stacked with other aircraft, and/or with ground units.

**11.07** All aircraft must move as many hexes as they are able. Thus, an aircraft with (for instance) five movement points *must* move five hexes. Unlike ground units, aircraft are forced to move their full movement allowance every turn.



**“Speed” Webber did a lot of *CAR WARS* art for *The Space Gamer*, but he occasionally turned his hand to *OGRE*, and he always put his own spin on things. Here’s the CSA envisioned as a VTOL aircraft.**

**11.071** Fighters have a movement allowance of 6; however, a fighter may move either 5 or 6 hexes, at its owning player’s option. This is an exception to 11.07.

**11.08** The only ground-based units that can attack aircraft (aside from AA units) are Howitzers and Ogres.

**11.081** An Ogre may attack aircraft with its missiles and with its primary batteries. Secondary batteries and antipersonnel weapons, however, are ineffective against aircraft.

**11.082** Howitzers have their attack strength halved when attacking aircraft.

**11.09** A “D” result prevents an aircraft from attacking or dropping bombs. It may still move normally in all ways.

**11.10** If an aircraft leaves the map, keep track of its position and bring it back by the quickest route possible.

## 12.0 BOMBERS

**12.01** Bombers are aircraft designed to deliver a load of explosives or tactical nukes to a specific target. They do not carry weaponry other than their bombs.

**12.02** Each bomber is considered to carry three bombloads, and may therefore make only three attacks in a single game. After a bomber has made its three attacks, it becomes useless and is removed from the board.

**12.03** Bombers release their bombloads while moving, not during the combat phase. A bomber may release a bombload in any hex that it moves through in the course of its movement. Any unit in the hex in which a bombload is dropped immediately undergoes an attack by the bombload, which is considered to have an attack strength of 6.

**12.04** An aircraft may release as many of its bombloads in a single hex as its owning player desires. It may release bombloads in any pattern at any time during its movement.

**12.05** After a bomber releases a bombload, it may continue moving. Attacks by bombers are resolved in the movement phase, so an aircraft that has not expended all its movement points may continue to move after releasing a bombload.

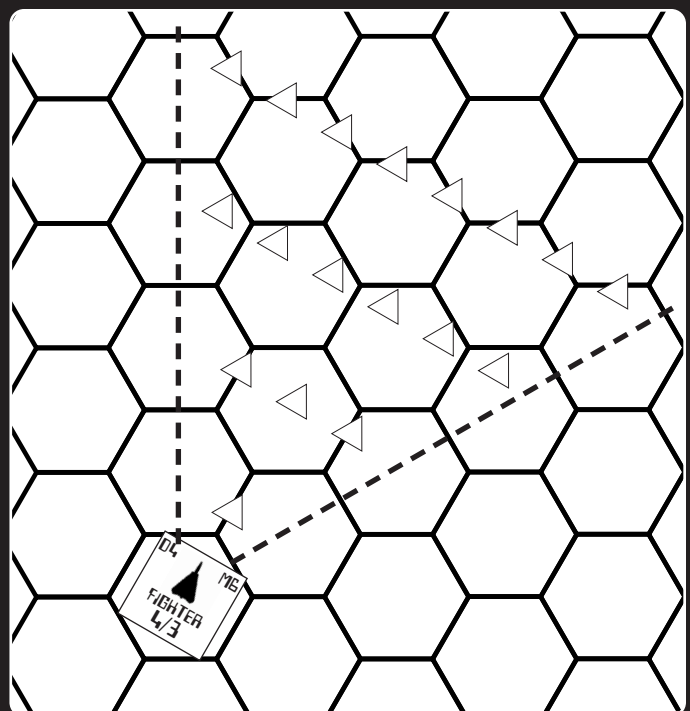
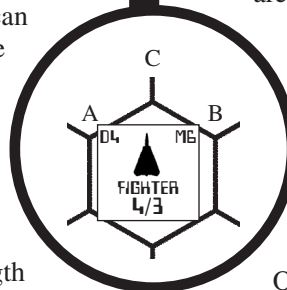
**12.06** Bombs are considered to have no effect on aircraft; they may only affect ground units.

**12.07** Bombloads have their attack strength halved (to 3) when infantry units are bombed, because infantry tends to be more dispersed than armor.

**12.08** Although when all other units are bombed, a bombload’s attack strength is treated as a single unit, as is the fire of normal units (see Sec. 6.09), a bombload may split up its attack strength when attacking an Ogre.

**12.081** A bombload’s attack strength may be split into as many as six parts. The way in which a bombload’s strength is split need not be into equal divisions – thus, a bombload’s strength could be split into one attack at a strength of 4, and one of 2. Each of the parts of a divided bombload’s attack strength may attack a different part of an Ogre. *Example:* A bombload’s attack strength is split into one attack with a strength of 2, and four at 1. The 2 is used to obtain a 1-2 attack on a main battery. The four 1s are used to obtain 1-1 attacks on four successive antipersonnel batteries.

**12.082** Although a bombload’s attack strength may be divided, a single weapon system of an Ogre may only undergo one attack from a bombload. Thus, a bombload’s strength could not be divided so that, for instance, one weapon system underwent three 1-1 attacks. If any single weapons system of an Ogre is attacked, the attack strength points devoted to attacking that weapon system are totaled in a single attack.



### 13.0 FIGHTERS

**13.01** Fighters are aircraft designed to intercept bombers, and to protect bombers from intercepting fighters. As well, they are capable of strafing ground units.

**13.02** Unlike bombers, fighters make attacks in the normal manner. They do not carry bombloads, but simply attack enemy units. However, a fighter may only attack enemy units in its forward arc (see illustration). A fighter's forward arc is all those hexes that a fighter could move into if it were moving; i.e., a fighter's forward arc is bounded by the two hex rows that can be traced from the two hexes in front of a fighter.

**13.021** A fighter's forward arc does include the hex it is in; thus, a fighter may attack aircraft in its hex.

**13.03** Fighters may attack either aircraft or ground units. However, a fighter's attack strength is halved when it attacks a ground unit.

### 14.0 FLYING FORTRESSES

**14.01** Flying Fortresses, also known as Continental Siege Aircraft, or Ogre Magi, are the airborne equivalent of Ogres. There are two types of Flying Fortresses: CSA-10 and CSA-15.

**14.02** Flying Fortresses have "propulsion units" which are treated exactly like the tread units of an Ogre. Attacks against propulsion units are the only way to bring Ogre Magi down. Each Flying Fortress begins with a movement allowance of 4, and, in keeping with 11.07, must move 4 hexes each turn. When a Flying Fortress has lost a certain number of propulsion units, its movement allowance falls to 3, at which point it must move 3 hexes a turn . . . and so on. Note that its MA falls one point for every quarter of its propulsion units it loses. Eventually, its MA may fall to zero, at which point it comes crashing to the ground and is destroyed. (No, it may not ram units in the hex where it crashes!)

**14.03** Flying Fortresses have two types of bombs: one type (listed in the Record Sheet as Bombloads) are treated in exactly the same manner as are bombers' bombloads. The other type is antipersonnel bombs.

**14.031** Antipersonnel bombloads are dropped in the same manner as regular bombloads. However, antipersonnel bombs have no effect on armor units; that is to say, they affect only infantry and CPs.

**14.04** Flying Fortresses are equipped with air-to-air missiles. These may only be used on enemy aircraft; they have no effect on ground units.

**14.05** Flying Fortresses are equipped with two types of guns – main and secondary. These fire in the same way fighters' guns do; i.e., they may only be fired in the forward arc of the Flying Fortress.

**14.06** Flying Fortresses attack and are attacked in the same way as Ogres. That is, attacks on Flying Fortresses must be directed against specific weapons, and the Flying Fortress is not destroyed until it loses all its propulsion units.

### 15.0 ANTI-AIRCRAFT UNITS

**15.01** Anti-Aircraft units are ground-based units designed to destroy aircraft. Although they can be used against ground units as well as aircraft, they are less effective when attacking ground units.

**15.02** There are two types of AA units – Light AA and Heavy AA. Their strengths are indicated below.

|                          |                          |                          |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 02 M1<br>LIGHT AA<br>6/5 | 02 M1<br>LIGHT AA<br>6/5 | 02 M1<br>LIGHT AA<br>6/5 | 02 M1<br>LIGHT AA<br>6/5 | 02 M1<br>LIGHT AA<br>6/5 | 02 M1<br>LIGHT AA<br>6/5 |
| 03 M0<br>HVVY AA<br>8/6  | 03 M0<br>HVVY AA<br>8/6  | 03 M0<br>HVVY AA<br>8/6  | 03 M0<br>HVVY AA<br>8/6  | 03 M0<br>HVVY AA<br>8/6  | 03 M0<br>HVVY AA<br>8/6  |

PERMISSION IS GRANTED TO PHOTOCOPY THESE COUNTERS.

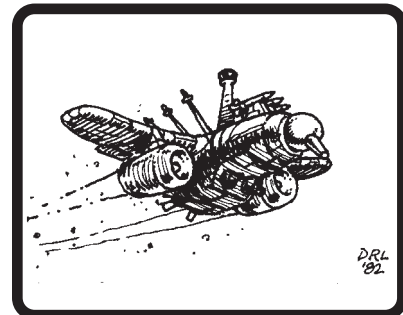
**15.03** AA units have their attack strength halved when attacking ground units. They use their full attack strength only when attacking aircraft.

**15.04** Note that a Light AA unit has a movement allowance of 1, while a Heavy AA unit is immobile.

## CHART OF ATTACK MULTIPLES

|                 | vs. Aircraft                  | vs. Ground Units    |
|-----------------|-------------------------------|---------------------|
| Infantry        | × 0                           | × 1                 |
| Howitzer        | × ½                           | × 1                 |
| Other Armor     | × 0                           | × 1                 |
| AA Unit         | × 1                           | × ½                 |
| Ogre            | × 1 (Main battery & missiles) | × 1                 |
| Bomber          | × 0                           | × 1 (× 1/2 vs. INF) |
| Fighter         | × 1                           | × ½                 |
| Flying Fortress | × 1 (except bombs)            | × ½ (bombs × 1)     |

(× 1 = full attack strength, × 2 = double attack strength, etc.)





## FLYING FORTRESS RECORD SHEETS

### CSA-10

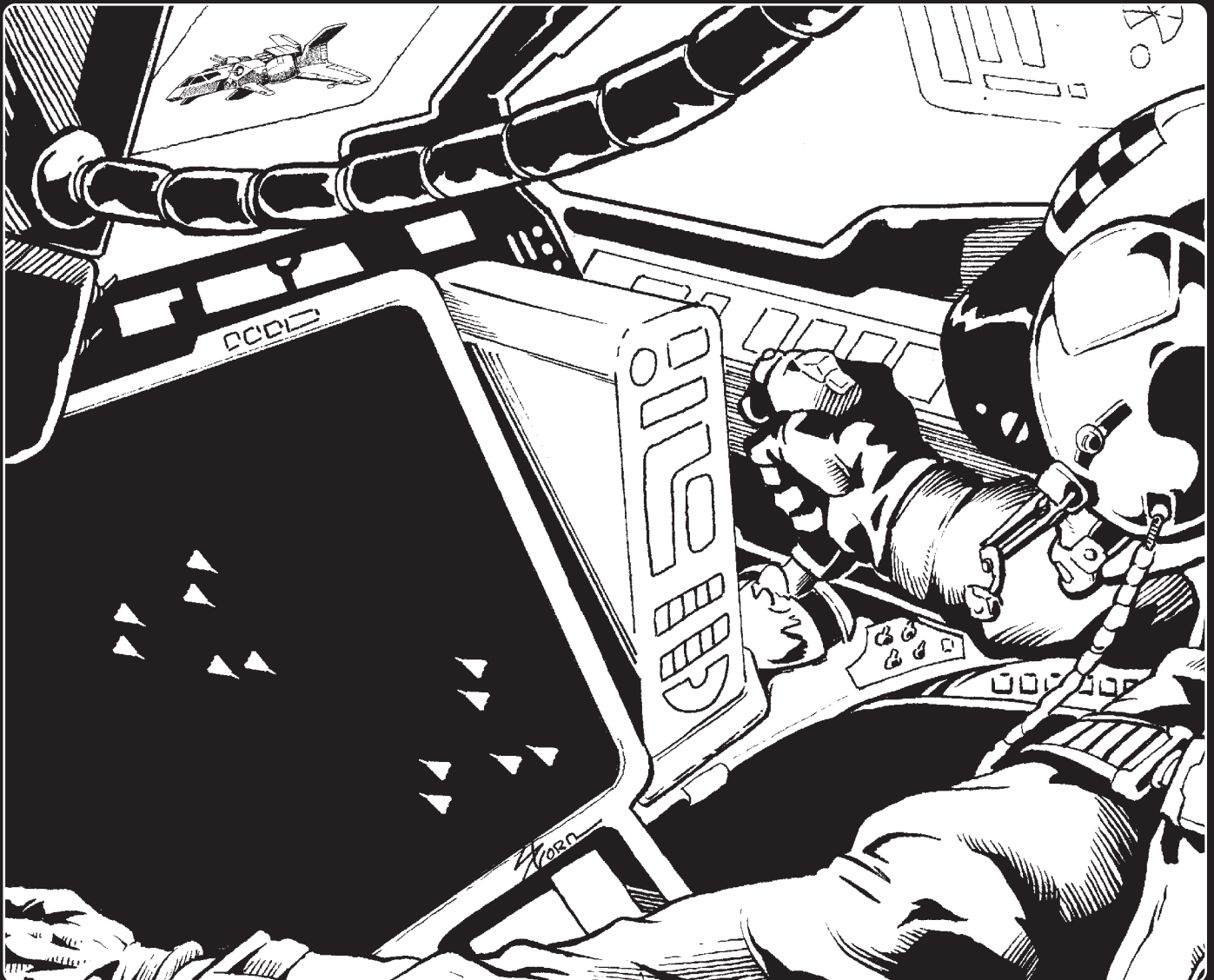
2 Bombloads (6/0; D3) ○○  
 1 Air-to-Air Missile (6/5; D3) ○  
 1 Main Gun (4/3; D4) ○  
 4 Secondary Guns (3/2; D3) ○○○○  
 12 Antipersonnel Bombloads  
     (1/0 against INF & CPs only; D1)  
 ○○○○○○ ○○○○○○

48 Propulsion Units  
 ○○○○ ○○○○ ○○○○ (M3)  
 ○○○○ ○○○○ ○○○○ (M2)  
 ○○○○ ○○○○ ○○○○ (M1)  
 ○○○○ ○○○○ ○○○○ (M0)  
                     CSA-10 destroyed

### CSA-15

4 Bombloads (6/0; D3) ○○○○  
 3 Air-to-Air Missiles (6/5; D3) ○○○  
 2 Main Guns (4/3; D4) ○○  
 6 Secondary Guns (3/2; D3) ○○○ ○○○  
 18 Antipersonnel Bombloads  
     (1/0 against INF & CPs only; D1)  
 ○○○○○○ ○○○○○○ ○○○○○○

60 Propulsion Units  
 ○○○○○○ ○○○○○○ ○○○○○○ (M3)  
 ○○○○○○ ○○○○○○ ○○○○○○ (M2)  
 ○○○○○○ ○○○○○○ ○○○○○○ (M1)  
 ○○○○○○ ○○○○○○ ○○○○○○ (M0)  
                     CSA-15 destroyed



**A** follow-on to Greg's variant, adding underwater battles. At this point, we got completely away from the original scenarios . . .

The LSEV is sort of like the GEV-PC which was introduced in *Shockwave*, but its carrying capacity seems contradictory; a platoon of infantry should take up a lot less

space than a Heavy or Missile Tank. I also question whether, in either reality or game-balance terms, the SEVs and SESs should be allowed to blithely go onto the land. Nevertheless, there's room for an *Ogre*-world naval game, and maybe someday we'll do it. If we can just find some way to make the map anything but a plain blue sheet.

# BPC SUBS

By Martin Halbert

## 16.00 INTRODUCTION

"BPC Subs" is a set of rules governing naval battles in sea-warfare variants of *Ogre*. It builds on the concepts introduced in "Continental Siege Aircraft."

## 17.00 SUBMARINES

Submarines are underwater units which begin hidden, but can be subsequently detected and/or reveal themselves. They have a defense factor of 3, a movement factor of 2, and a strength/range factor of 6/5.

**17.01 Setup.** At the beginning of the game the owning player selects positions for his subs. Counters are not actually placed on the board; players must remember their opening positions until changed, and keep track of their positions after that. This scenario requires good recordkeeping and scrupulous honesty.

**17.02** Detection occurs in four ways. Once detected, a unit remains detected until it successfully escapes detection by moving (17.022). As long as a unit is detected, its counter stays on the board.

**17.021** When a sub attacks in any way, it is detected.

**17.022** When a sub moves, a die is cast to determine if it is detected. If the sub is hidden before it moves, it remains hidden on a 1-3, and is detected on a 4-6. If the sub has already been detected at the time it moves, it manages to escape detection on a 1 (remove its counter from the board again), but remains detected on a 2 through 6.

**17.023** When an enemy unit moves adjacent to a sub, the sub is detected.

**17.024** When a sub releases decoy torpedoes (see Section 17.03), its counter is placed on the board inverted.

**17.03** To mask its movement, a sub may launch one decoy torpedo during each movement phase. This automatically negates procedure 17.022, but the decision to launch a decoy must be made before movement. A sub cannot first roll to stay hidden and then, if revealed, launch a decoy torpedo. A decoy torpedo is represented by an inverted counter; it may move 1 or 2 hexes its first turn and disappears just before its second turn. A sub that has launched a decoy remains inverted until the next movement phase, whether or not it attacks or an enemy unit moves adjacent (exceptions to 17.021 and 17.023). A decoy torpedo is destroyed by any attack and has no effect on other units.

## 18.00 COMBAT

Subs attack and are attacked by surface craft in a normal manner. If a sub suffers a "disabled" result, it is considered surfaced, and its position immediately becomes known.

**18.01** A sub may voluntarily surface to bombard coastal targets. A sub attacks at half strength against shore targets. When a sub surfaces it stays surfaced until its next movement phase. Surfacing costs nothing; a sub may surface and also move its full movement allowance.

**18.02** When detected, a sub may be attacked by bomber aircraft in a normal manner (considered a depth charge attack). They may be attacked by both bombers and fighters when surfaced. A sub attacks at half strength against aircraft.



### 19.00 SEVs

SEVs (Surface Effect Vehicles) are larger versions of GEVs. There are two kinds of SEV.

**19.01 LSEVs.** The LSEV (Landing SEV) is used for amphibious operations. Each LSEV can transport either one heavy tank, one missile tank and one squad of infantry (1/1); or one full platoon of infantry (3/1). They have a defense factor of 2, and can move 6 hexes in a turn. LSEVs have no offensive strength. To load or unload they must stay in one place for a full turn. The unloaded units can move and attack after this, or the loaded LSEVs may move off.

**19.02 SESs.** The SES (surface effect ship) is a fast destroyer-sized vessel. It has a defense of 4 and moves similarly to GEVs. It has one main battery (4/3), and two missiles (6/5). These do not have individual defense factors as the weapons on an Ogre do. When an SES receives a “destroyed” result, all the weapons are destroyed along with the ship.

**19.03 Hovercopter (Optional).** The SES can also carry a small hovercopter. It has no attack or defense strength. Its purpose is to search for subs. A hovercopter can detect a sub if it is the same hex at the end of the hovercopter’s movement phase. The hovercopter has a movement allowance of 12.

### 20.00 THE SEA CONTROL SHIP

The Sea Control Ship is a seagoing platform. It can serve as a small aircraft carrier in battle. It can launch four fighters in a game; one at a time, or all at once. It can also launch four hovercopters in a game. The SCS has a defense of 2, a movement factor of 2, and no attack strength.

### 21.00 WATER MOVEMENT

GEVs, SEVs, and SCSs (as well as surfaced subs) move on the surface of the water. SEVs may move normally

on land hexes; subs and SCSs may not go on land. Ogres may enter the water (see 21.01). Aircraft may cross over water areas. No other units may enter water hexes.

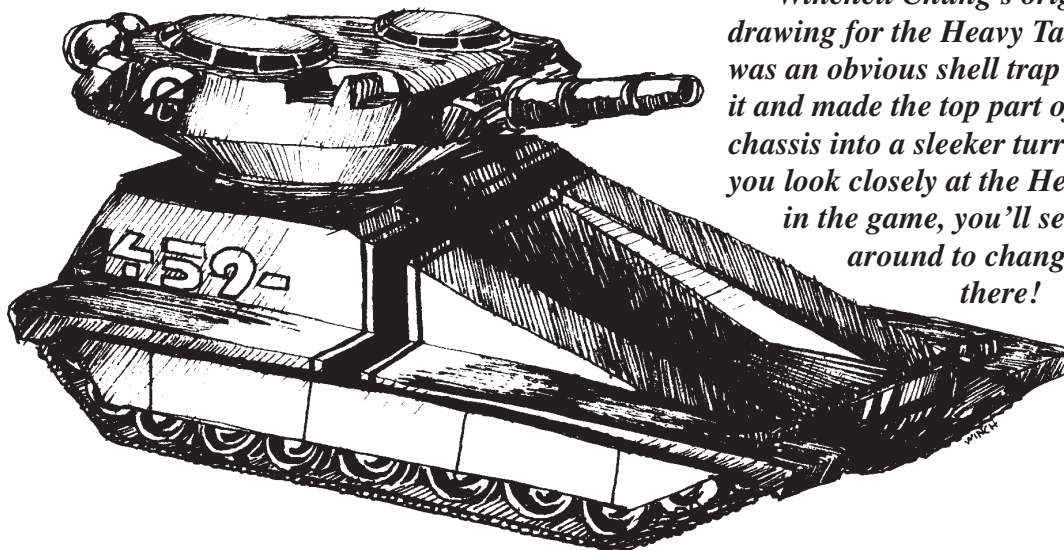
**21.01** Ogres may move along the sea floor at a cost of 2 movement points per hex. This means that, to begin with, they may only move one hex per turn. Missiles are the only Ogre weapons that may be used underwater; these are used normally. An Ogre may begin play hidden (as for subs) and does not reveal itself by movement. Once an Ogre fires a missile, it is revealed and stays revealed. When an Ogre’s tread units are attacked while it is submerged, the attack is at 2-1 odds, rather than 1-1.

**21.02** Only one submerged unit may occupy a given water hex (exception: two enemy underwater units may pass through the same hex if neither has been detected). A surface unit and a submerged unit may occupy the same hex and attack each other. Surfaced subs may occupy the same hex as submerged subs, but not with surface ships.

### 22.00 MAP

Obviously the *Ogre* map, as it stands, cannot be used for sea battles. A simple scenario can be constructed by treating clear hexes as water hexes, and craters and obstructed hexsides as coral and impassable to subs. The last row of hexes should be treated as the shore and the objective of an invading player. Howitzer batteries can be set up on the crater/island hexes as shore defense. Interesting amphibious invasion battles can be invented with LSEVs and Ogres. A “wolf pack” scenario with convoy vs. subs can be played, ignoring all terrain. Imagination is the only limit.

**22.01** Mined areas are predesignated sections that are considered mined with proximity explosives. When a surface craft or sub passes through a mined area it immediately undergoes a 1-1 attack. Special minelaying subs and SEVs can “mine” a hex by spending three consecutive turns there inactive.



*Winchell Chung's original drawing for the Heavy Tank. The big turret was an obvious shell trap – we just removed it and made the top part of the original chassis into a sleeker turret. However, if you look closely at the Heavy Tank counter in the game, you'll see we never got around to changing the silhouette there!*



**T**really excellent collection of variant rules, with a sophisticated way to generate a lot of different scenarios from a few tables. His 10.04 prefigured the Marine battlesuit. His “heavy missile tank” is a very logical unit, and the only reason that we didn’t add something like this to the game is a

design consideration: so far, I’ve managed to avoid creating any small units that require record sheets. If you don’t mind numbering your heavy missile counters and recording how many missiles each one has fired, go for it.

## ADDING FEAR AND LOATHING TO G.E.V.

By Timothy C. Wiedel, Ph.D.

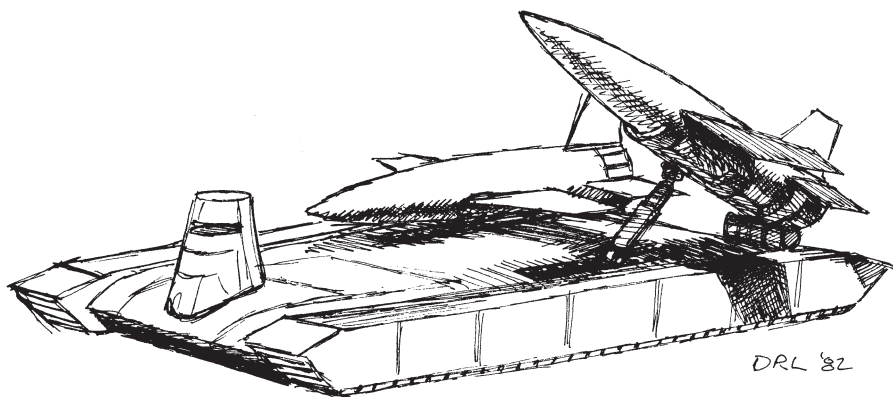
*G.E.V.* is an exciting expansion of the *Ogre* rules system. Below I have suggested a few optional rule modifications which can add a little more anxiety to the *G.E.V.* game. Some of us gamers like to feel a little adrenaline in our veins from time to time.

### Who’s Afraid of the Big Bad Ogre?

One thing I miss in *G.E.V.* is the ramming rule in the *Ogre* game (oh, I know it’s more realistic, Steve, but a guy has to have some fun once in a while), which disrupts or kills everything on the board. In *G.E.V.*, units involved in an overrun (same as ramming in *Ogre*) get to fire back and forth in fire rounds with infantry and Ogre being doubled. If you have an Ogre, all of the units are going to get to fire at you before you can squash them. A number of infantry squads can be especially deadly. Now, I’m not saying this couldn’t happen, but they would have to be very brave

men to stand up and fire faster than an Ogre. In combat situations, men often panic and freeze, unable to fire – especially if they aren’t under cover and there’s an Ogre Mark IV coming at them. A similar argument can be advanced when the Ogre is overrunning a vehicle. Is the small computer in a heavy tank going to fire its guns faster and more accurately than the large cybernetic computer of the Ogre? To put a little fear into the heart of the defender when an Ogre is present, you might want to incorporate the following optional first-fire overrun rules into your *G.E.V.* games.

**OP 10.01 Infantry Panic.** When being overrun by an Ogre or when overrunning an Ogre, infantry must roll a number on one die equal to or less than the total number of adjusted infantry strength points (SP) for terrain in a hex. (Thus, 1 SP of infantry in a town hex has to roll 3 or less to fire.) If this number is rolled, the infantry may then fire at the Ogre in the first and subsequent fire rounds. Obviously if there are 6 or more adjusted strength points



*A Denis Loubet concept sketch for the Heavy Missile Tank – or should that be “Light Missile Crawler”? If we ever really do it, the chassis will be shorter than the scale of the tower suggests, and the missiles will be Ogre missile size.*

of infantry, panic is not rolled for, and firing is normal (as per the *G.E.V.* rules) until destruction.

**OP 10.011 Repeated Attempts.** Units which do not pass the panic die roll may try again at the beginning of the second fire round, with what is left of the infantry strength points. The infantry may continue to try to pass the panic test at the beginning of each fire round until they are all destroyed. They may never fire until they pass the test.

**OP 10.02 Ogre First Fire.** All other units (except another Ogre) which are overrun by, or attempt to overrun, an Ogre, must roll a 4 or less on one die in order to fire on the first fire round. If they survive they may automatically fire on the second round and all subsequent rounds (as per the *G.E.V.* rules).

## WHY NOT GIVE YOUR MISSILE TANKS SOME TEETH?

The Ogre is equipped with excellent missiles, but whatever happened to the poor missile tank? A missile tank should be able to carry the same type of missile as the Ogre. For a missile tank which will make your enemy think twice, you might want to try these optional rules.

**OP 10.03 Heavy Missile Tank.** Has one missile launcher and may carry two 6/5 missiles (same missile type as an Ogre), instead of the usual missile tank attack strength and range. It costs the same as a regular missile tank. When both missiles have been fired, the tank is assumed to have a minimal attack strength of 1 (because of heavy machine guns) in an overrun situation only; it has no other attack strength, but it does still have the normal defense strength.

**OP 10.031 Effect of Disruption.** Missile tanks may not fire missiles when they are disrupted. A disrupted missile tank is assumed to have an attack strength of 1 in an overrun situation.

## WHY ARE GEVs THE ONLY UNITS WHO CAN PLAY IN THE WATER?

The *G.E.V.* rules give only GEVs both water mobility and water combat effectiveness. Ogres can go under the river. But the poor infantry have to swim. Certainly with a technology that can produce Ogres and infantry jump suits, something could be done to give the infantry both water mobility and water combat capability. If you would like to have water mobility for your units, you might try these optional rules.

**OP 10.04 Underwater Infantry.** Special infantry may fight and move under water using a jet propulsion unit and special weapons. Each factor of underwater infantry costs 2 infantry SP and its loss is the same as losing 2 SP. Mark the infantry unit with a "U" to indicate its special status.

**OP 10.041 Movement.** Underwater infantry can move two river hexes per turn but only one land hex



(unless they are being transported or are on a road). To go into the water they must start their turn on a land hex or bridge adjacent to the river or swamp (the swamp counts as a river hex for these units). To leave the water they must start the turn adjacent to the land hex and stop when they reach the first land hex.

**OP 10.042 Combat.** Underwater infantry may *not* make normal attacks while they are in a water hex. However, they are tripled in overrun attacks against units in a water hex (includes Ogres at the river bottom). In water they always defend with double their defense strength, and on land they attack and defend as normal infantry.

**OP 10.05 Vehicle Flotation.** All mobile units (other than Ogres) can cross water hexes with the help of flotation devices, which all units are assumed to carry.

**OP 10.051 River Movement.** To float on the water, a unit must end its turn adjacent to a water hex (units may not float on or off of swamp hexes). On the next turn it may move one water hex per turn. To move off the water, a unit must be adjacent to a land hex; it may move one hex on land and stop until the next turn, when it can move normally.

**OP 10.052 Disruption and Defense.** Disrupted units may not move on or off the water; however, if on the water they may still float one hex per turn. All units floating on the water have a defense strength of 0.

## RANDOM SCENARIO SELECTION

For those who have played all the *G.E.V.* scenarios already, here's a random selection scenario series that gives over 216 different combinations. This should keep you busy for a while. A similar system appeared in the Avalon Hill game *Squad Leader*. Start by randomly choosing a defending force, as in 10.06. Each player then makes up his own attacking force; the player with the lowest point total attacks with his force, and the other player defends with the force already chosen.

**OP 10.06 Selection of Defending Force.** Roll a die to determine the defending force both players will be bidding to attack.

| Roll | Defending Force                                                                   |
|------|-----------------------------------------------------------------------------------|
| 1    | 24 Infantry<br>3 Howitzers<br>2 Mobile Howitzers                                  |
| 2    | 1 Ogre Mark IV<br>12 Infantry                                                     |
| 3    | 6 Heavy Tanks<br>6 Missile Tanks<br>6 Light Tanks<br>6 GEVs<br>2 Mobile Howitzers |
| 4    | 15 Infantry<br>6 GEVs<br>2 Howitzers                                              |
| 5    | 1 Ogre Mark IV<br>6 GEVs                                                          |
| 6    | 18 Infantry<br>4 Heavy Tanks<br>4 Missile Tanks<br>6 Light Tanks                  |

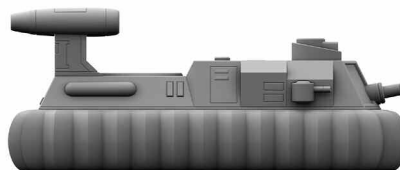
**OP 10.061 Selection of Victory Conditions.** Roll a die to determine the victory conditions for the attacking force. For the defender to win, he must prevent the attacking force from fulfilling the victory conditions.

| Roll | Attacker Victory Conditions                                                                                                                                                  |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | Eliminate all defending units. (An Ogre must be immobilized.)                                                                                                                |
| 2    | Destroy command post (the defender gets 1 Gamma command post, which he may place anywhere on the board) and have a unit point loss total less than or equal to the defender. |
| 3    | Control Road. There must be no enemy units within firing range of the road from hex 1812 to hex 0706 at the end of the game.                                                 |
| 4    | Destroy town hexes – 6 town hexes for marginal victory; all town hexes for complete victory.                                                                                 |
| 5    | Occupy bridge hexes (1913, 1905, 0412) and have no enemy units within firing range of these hexes at the end of the game.                                                    |
| 6    | Preserve your force. The side with the lowest unit point loss total wins the game.                                                                                           |

**OP 10.062 Selection of Attacker Board Entry.** Roll a die to determine where the attacking force will enter the game board. (Note: If “in column” is specified, the attacker must enter each unit on the road, although he may stack. Thus the first stack of units would enter the board

with no movement penalty. The second stack would lose 1 road movement point, the third stack 2 road movement points, and so on.)

| Roll | Attacker Enters:     |
|------|----------------------|
| 1    | South edge, anywhere |
| 2    | Hex 0422, in column  |
| 3    | East edge, anywhere. |
| 4    | West edge, anywhere  |
| 5    | Hex 1822, in column  |
| 6    | North edge, anywhere |



**OP 10.063 Selection of Game Length.** Roll a die to determine the length of the game: 8 turns, plus the number shown on the die. To win, the attacker must fulfill his victory conditions by the last game turn.

#### OP 10.064 Special Rules.

Do not use the evacuation rule.

The defender can set up anywhere on the board, *except* that he may not set up on hexes adjacent to the side of the board on which the attacker will enter.

The defender sets up first with all of his counters covered. The counters are revealed at the conclusion of the attacking player’s first movement phase.

The attacker moves first.

The attacker does not have to bring all of his units on the board the first turn.

**OP 10.065 Bidding for the Attacking Force.** After the composition of the defending force, victory conditions, attacker hex entry, and game length have been determined, each player secretly develops an attacking force to achieve the victory conditions. Unit cost is determined by using the unit point losses in the *G.E.V.* rules. For example, an Ogre Mark IV costs 105 points (obtained by adding up the point losses for treads and weapons); a GEV, 6 points; and each infantry SP, 2 points. Next, each player totals the number of points in his attacking force. Players show each other their point totals; the one with the lowest unit point total will attack with his force. The other player will play the defender, using the defending force which was selected by the die roll. *Note:* It is a good idea for each player to check the other’s arithmetic – errors in addition, especially in the downward direction, are not uncommon.

See if these rules change the taste of your beer and pretzels!



I really like game scenarios that are accompanied by good fiction. In "Iron Mountain," the story puts a human face on the game. The trucks become more than moving targets, and the outgunned defenders become much more than counters with combat factors.

In Richard's original version of the story, the heroes of Iron Mountain were Combine troops. They've become Paneuropean because, when we worked out the timeline, the Mark III-B was a Combine unit. So the story changed a bit to leave the scenario intact. Heroism is heroism, regardless of the uniform.

# IRON MOUNTAIN

By J. Richard Jarvinen

"Well, sir, what do you think?"

Captain Emory R. Hanson, Third Army, Paneurope, slowly lowered his field glasses from the small plume of dust rapidly approaching his transport column.

"Yeah, lieutenant, it looks like one of ours. Probably Jacobs, judging from the direction."

"But he's not supposed to report for another half-hour. And besides, wouldn't he call if there were trouble?"

"Yes, he would. If he could."

Captain Hanson had reason to worry. He was solely responsible for delivering ten truckloads of sodium nitrate to Launch Site B, high on Iron Mountain. Four armored vehicles, three GEVs and five platoons of powered infantry ought to be adequate protection, but...

"Lieutenant!" snapped Captain Hanson. "I want you to inform all drivers that they are to proceed at maximum possible speed. Now!"

The lieutenant hesitated, as if to say something, but apparently thought better of his impulse. "Yes, sir," he said, and ran quickly down the caravan to issue the order. Hanson raised his glasses again and peered over the windscreen of his jeep, studying the unexpected and unidentified vehicle. The roar of the giant diesels reverberated through the air as the 4-ton trucks began their arduous climb up the mountain road.

Five minutes later, Hanson was still standing in his jeep when one of his GEVs drew up close and shut down its power, falling to the earth with a cry of tearing metal, rather than settling slowly as air-cushioned vehicles nor-

mally stop. The door literally flew open and Corporal Jeffrey Jacobs stumbled out, his left arm hanging bloody and useless at his side.

"Sir," he panted, "an Ogre! It almost got us! Blew our radio out on the first shot. It was all we could do to get away. Simpson's dead, Meyer's hurt, but not badly..."

"Easy, son," the captain interrupted. "Just tell me what I want to know. How far back is it and what direction is it headed?"

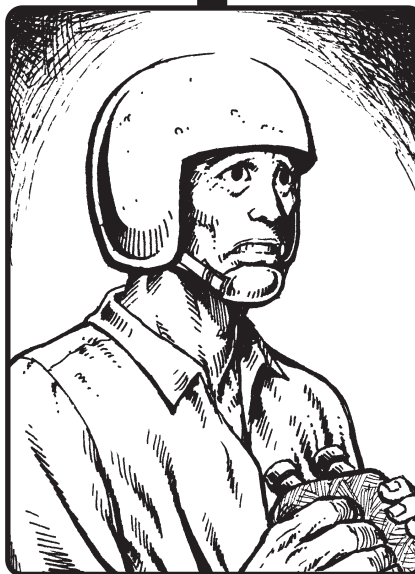
The corporal paused to catch his breath. When he did speak, it was in gasps and he kept wiping his brow with his good arm. "We spotted it about 40 clicks back, just before it saw us. We exchanged a couple of shots and then we took off. It must still be following us, but our radar went out with our radio." Jacobs eyed the remains of the antenna that had flown proudly atop his vehicle. He turned back, half smiling. "I think we got a hit on its treads."

"Good work, corporal. Did you recognize the type?"

"No, sir, not exactly, but from the size, it must have been a Mark III. It was kinda hard to judge at our distance and we ran pretty fast."

"All right, corporal, you're dismissed. Catch up with the van. The last wagon should have some medical equipment to take care of that arm."

"Yes, sir," said Jacobs and went running back into his GEV, which started almost immediately. Lifting clumsily from the ground, it slowly accelerated up the road in pursuit of the convoy.



Hanson sat down, wiping his hand over his mouth, a habit most people recognized in him as a sign of extreme anxiety. His driver, Sergeant Wiles, looked at him speculatively. "Well, do you think we can outrun it?"

Hanson paused before responding. "I don't know. I hope to hell we can. Catch up with the trucks. I've got some figuring to do," As the jeep started off, Hanson reached into a compartment and grabbed a map and pocket calculator. He began to figure.

When they reached the rear of the convoy, Lieutenant Boucher was waiting in his own jeep.

"Did you find out what it was?"

Hanson frowned at his question. "It's an Ogre, lieutenant, and it's coming straight at us." The lieutenant paled, while Hanson continued. "Here's what I want you to do. Up ahead there's a large turnout. I want all the lead tanks and GEVs to pull over and let the main convoy pass. Then they are to pull in after the last truck and be ready for action from the rear. And Lieutenant, I want this information radioed. Now!" The lieutenant jumped up, barked a "yessir," and ran off.

"OK, sergeant, let's go. I want to be at the front of this convoy ASAP." Sergeant Wiles put the jeep into gear, jammed down the pedal and they raced off, gravel and rubber scattering behind them. Captain Hanson looked at his watch and then went back to work on his calculator.

The lieutenant had now joined Captain Hanson in his jeep as it raced along in, front of the convoy. Anxiously he looked up.

"Do you think we can outrun it?" he asked.

"No, lieutenant, I do not."

The lieutenant bit his lip. "Then, I guess we'll . . ." his voice cracked slightly as he spoke, "we'll have to fight it."

"Yes, we will. But I'll tell you what we're going to do, just in case we suddenly have a new commander." Hanson looked hard at the lieutenant, who returned his gaze with determination, if not with confidence, fully aware of who was second in command. "Now, here's a map of the roads leading up Iron Mountain." Hanson sketched briefly on a small pad.

"The numbers are the distances in kilometers from one intersection to the next. We're at point X and are trying to reach B, the secondary launch site. The small, curvy line is the old post road. It's been unused for several years. Going up, you'll see we have two possible destinations. Regardless of our destination, the Ogre, with his superior speed, will be able to catch up. Our only advantage, and I emphasize only, is the Ogre doesn't know to which site we're headed. It turns out that if we're going to A, we should take the old road, and if we're going to B, we should take the new one. At least, that's what we should do if we want to prevent the Ogre from getting in front of us, which it could do if it took the opposite route from us. Which is exactly why we're going to take the old road."

"But I thought you just said that if we take the old road to get to site B, the Ogre could head us off by taking the new one. Wouldn't that be stupid? Ahh . . . excuse me, sir."

"That's all right, lieutenant. Yes, that would be stupid. And the Ogre knows we're not stupid. I hope. Therefore it will assume we're headed to site A, and thus follow us up the post road. It would lose more time by taking the new one if that's where we're headed."

"Just what does this buy us, Captain?" the lieutenant asked, with more than a trace of disapproval.

"About ten minutes, lieutenant. About ten minutes."

"And if the Ogre guesses right?"

"We've lost."

The convoy had successfully negotiated the old road without mishap and was now on the section connecting the old road with the new. Captain Hanson and the lieutenant were in the lead jeep, anxiously looking ahead. The captain broke the strained silence.

"The moment of truth arrives. But with luck . . ."

The lieutenant remained silent.

At the intersection, Hanson had the jeep pull over and he stood up, waving the trucks on.

"By God, I think we did it. The Ogre should have been here three minutes ago if it had outguessed us."

The lieutenant looked up skeptically. "You're sure?" he asked.

"Unless my computations were wrong. Okay, let's go!" The last truck had just disappeared around the corner, its tires squealing loudly in protest against the violent abuses it was forced to suffer. "I want one heavy tank, one GEV and one platoon to wait on either side of the intersection, just out of sight. They should be able to wheel around and get in a couple of good shots just as the Ogre comes around the last corner. Come on, let's move!"

Ten minutes later, Captain Hanson and the lieutenant, trailing the convoy once more, looked up suddenly as the sound of muffled explosions filled the air.

"First blood. Hand me the radio. Baldini, can you read me? What's happening?"

Baldini's voice came back over the speaker, weak but clear. "Yes, sir, we read you. Just like you said, Captain. The Ogre came tearing around the corner, not suspecting a thing. We got in a couple of good shots, but it's still coming strong. We're going in for a second attack. Over."

"Good work, Baldini."

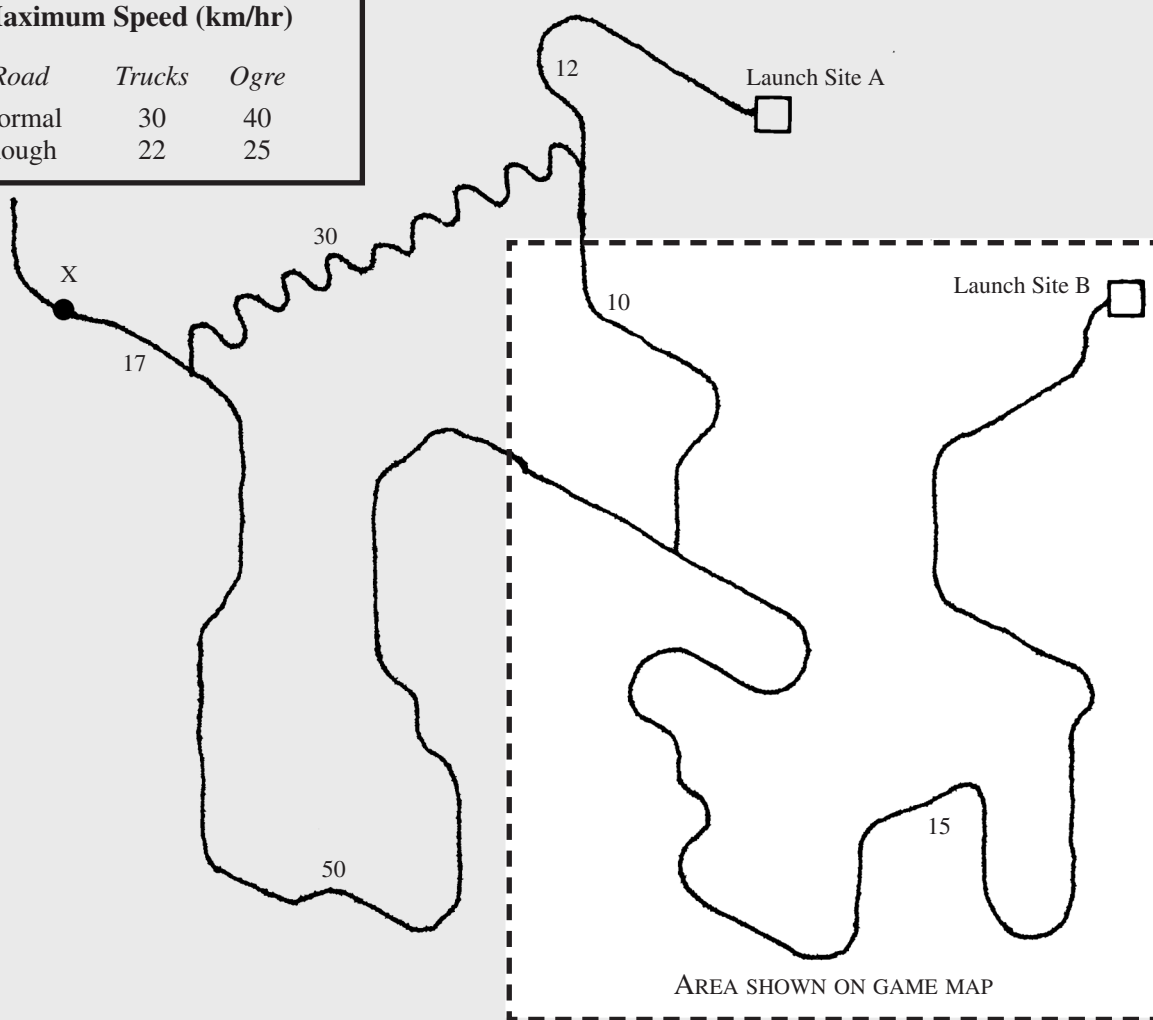
"My God!" Baldini's voice broke in. "It's got four missiles! But it's only the size of a Mark III. It also looks like it has two —" Baldini's voice was suddenly cut off, and a few seconds later, another explosion reached their ears. Hanson looked grim.

"Come on, lieutenant. Time to set another ambush."

"Is that possible, sir? Could a Mark III have four missiles? And what else was he trying to say?"

"Could be a later version of the same model. And I'm afraid he was telling us it had two main batteries. It's going to be rougher than I thought. Get all the drivers on the radio. Tell them to push forward and ignore all their temperature and pressure gauges. There should be a small howitzer up ahead. Get someone to check on it and make sure it's manned and supplied. And keep trying to raise Baldini."

| <i>Road</i> | <i>Trucks</i> | <i>Ogre</i> |
|-------------|---------------|-------------|
| Normal      | 30            | 40          |
| Rough       | 22            | 25          |





Men scattered in all directions at the screaming approach. Suddenly, one of the tanks exploded in a white flash, followed by a crimson ball of flame. Almost immediately following the first, a second explosion occurred. The following truck's cargo had been ignited by the intense heat of the nuclear blast. Hanson could hear the cries of the wounded and dying. Stunned, the men stood appalled at the horror so quickly wreaked. Hanson was the first to move.

"Man that gun! Get those missile tanks to lock in with us! We've already lost too much time!" The barrel of the howitzer lowered as it tracked the moving Ogre. A GEV went up in flames as the Ogre rolled over it. Simultaneously, the howitzer and the Ogre's big guns emitted jets of flame. Instantly the howitzer and one of the Ogre's main batteries were destroyed, each a victim of the other's vengeance. The lieutenant ran over to the shattered remains of the howitzer, looking for Hanson. The captain's body lay on a rock, nearly torn in two by the explosion, one hand still desperately gripping his radio. Slowly backing from the gruesome scene, the lieutenant stared in horror. Then, turning quickly, he ran back to the jeep.

"Let's go, sergeant. We may still get one more chance. It's (he refused to say the word Ogre) still got two more missiles, but if we can knock out both of them, some of the trucks may get through."

Sergeant Wiles, seemingly unperturbed by the absence of Captain Hanson, gunned the jeep forward.

In the end, five trucks did make it through safely. They were the only survivors of what is now known as the Battle of Iron Mountain. Little is known of how the lieutenant and his remaining force managed to destroy the Ogre's remaining missiles, but by the time the Ogre broke through the pass, it lacked the firepower to accomplish its mission and was too far behind to overrun the trucks. Almost despondently, the Ogre turned and made its way back down the mountain, subject only to the sporadic and ineffective shelling of the two howitzers guarding the entrance to Launch Site B.

## THE BATTLE OF IRON MOUNTAIN

*Ogre* is fast, clean, and most of all, fun . . . a very enjoyable game. This prompted the story you just read, and also the scenario which is to follow. With only a few rules

modifications and some new counters, you can recreate Captain Hanson's desperate attempt to delay or damage the Ogre (which, by the way, is a Mark III-B. Try this scenario with an ordinary Mark III and see what happens. Or try it with a Mark V! Ouch!).

## RULES MODIFICATIONS

1. Units may stack. Maximum stacking limit (for movement also!) is 3 defensive factors. Thus, a heavy tank virtually blocks the road.

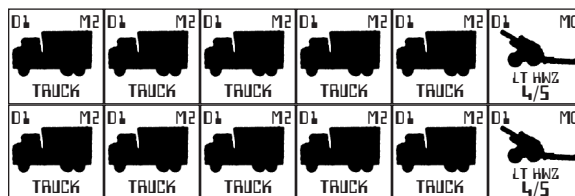
2. When any unit (except the Ogre or infantry) enters a hex containing any non-infantry unit, there is a cost of one additional movement point.

3. Any truck may attempt "accelerated" movement. On a die roll of 1, 2, or 3, the truck may move 3 hexes instead of 2. On a die roll of 4 or 5, the truck moves normally. On a die roll of 6, the truck moves normally, but then "stalls." A stalled truck may not move unless it rolls a 6 just prior to its movement phase. It may attempt to "unstall" once per turn.

4. Any non-truck unit may "shove" a stalled or disabled truck one hex in any direction (except into a mountain hex) at the cost of one movement point of the shoving unit. Thus, you may shove units into turnouts or

off the cliff (in which case they are immediately destroyed). Shoving units off cliffs is the only case when a unit may leave the road.

5. Mountain hexes (and hexsides!) block the line of fire for all units. This is the only case when the line of fire is blocked.

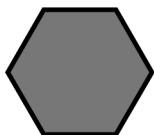


PERMISSION IS GRANTED TO PHOTOCOPY THESE COUNTERS.

6. You will need to make some new units: ten trucks and one 4/5 howitzer. The truck is a heavy, slow unit with defense 1 and movement 2.

# GAME MAP

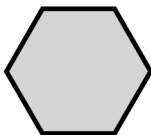
Mountain



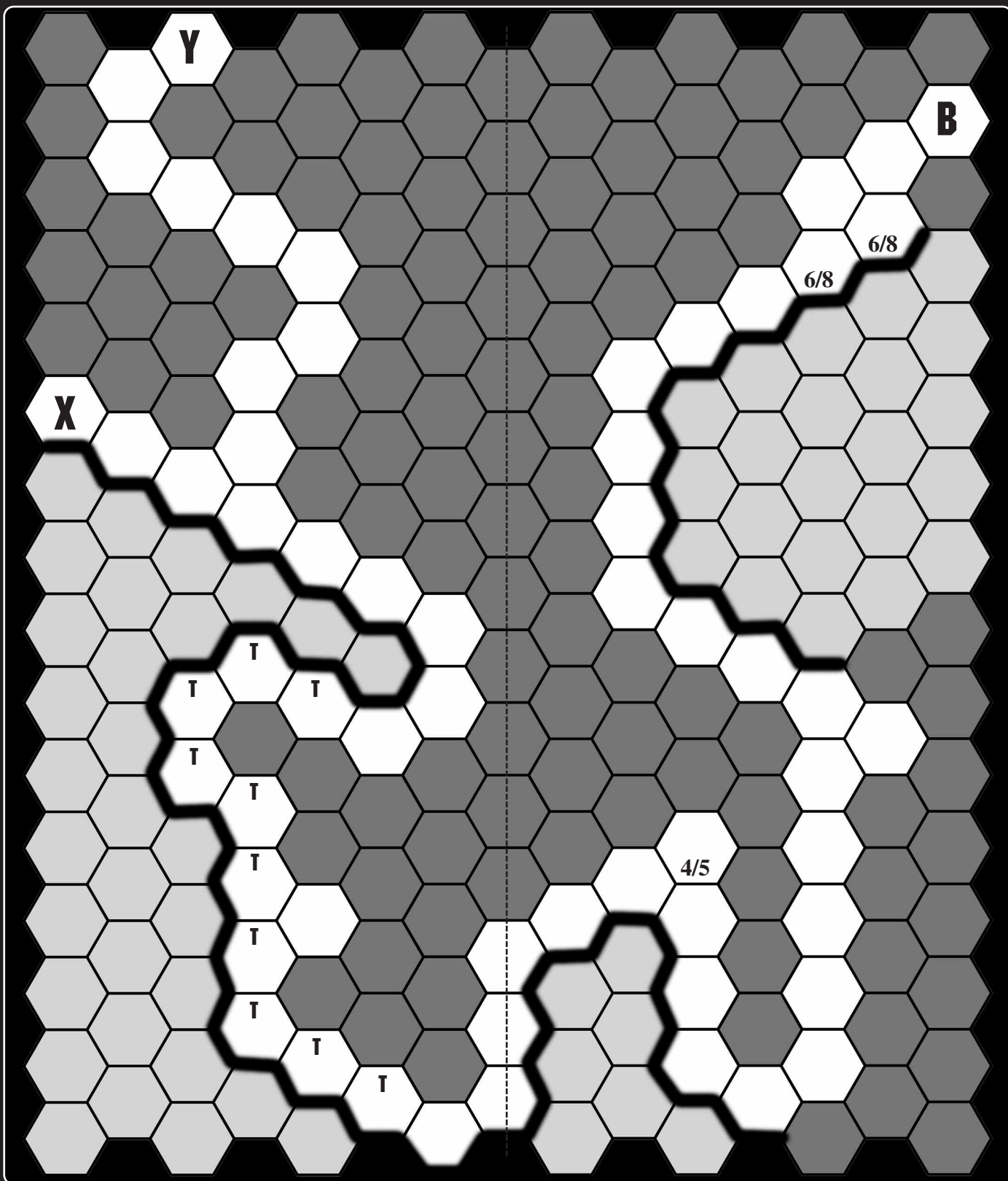
Cliff/  
Road



Plain



PERMISSION GRANTED TO COPY THIS PAGE. COPY THE MAP AT 120% TWICE, TRIM AT DOTTED LINE, AND TAPE TOGETHER THE HALVES. THE HEXES WILL THEN BE THE PROPER SIZE FOR THE COUNTERS.



The trucks start on the hexes indicated by a small “T” in the corner and the howitzer starts in the hex marked “4/5.” Note that two normal 6/8 howitzers start on hexes marked “6/8.”

7. Other starting units for the Paneuropean convoy are:

- Two Heavy Tanks
- Two Missile Tanks
- Three GEVs
- 15 points of infantry

These units may be set up on any road hex, subject to stacking limitations.

8. When a truck is destroyed (“X” result), any units in the same hex are immediately attacked with an attack strength of 3, and any units in adjacent hexes are attacked with an attack strength of 2. Note that a chain reaction of explosions may occur in a densely packed truck convoy.

9. An Ogre ramming a truck automatically destroys it, but the Ogre’s treads are attacked at 1-1 with an attack strength of 2.

10. Trucks may be attacked with antipersonnel weapons.

11. Because the narrow winding mountain road is not conducive to armored combat, only half (rounded up) of one type of the Ogre’s armament may be used against any one target. Different types may be combined, however. For example, the Ogre could use half of its main batteries against one target, while using the remainder against another target.

12. When more than one unit is stacked in a hex, the Ogre player must specify which unit he is attacking.

Other units are not affected (except in the case of truck explosions).

13. The convoy player moves first. The Ogre arrives on Hex X, spending one movement factor to do so. If the convoy player exits 5 or more trucks from Hex B, he wins. If he exits 4 trucks, he draws. If less than 4, he loses.

14. Start by marking off 4 tread units lost to Corporal Jacob’s hits.

Alternate scenarios are plentiful. For instance, start the convoy on Hex Y and the Ogre on Hex X. (Captain Hanson guessed wrong and the Ogre guessed right. Not much of a contest, but it shows what could have happened.) Or start the convoy 5 hexes closer to Hex Y. (Captain Hanson didn’t gain his 10 minutes. Makes quite a difference!) Have fun!

## OGRE MARK III-B

4 Missiles (6/5; D3) ○○○○

2 Main Battery (4/3; D4) ○○

4 Secondary Battery (3/2; D3) ○○○○

8 Antipersonnel (1/1 vs. infantry or trucks; D1)  
○○○○ ○○○○

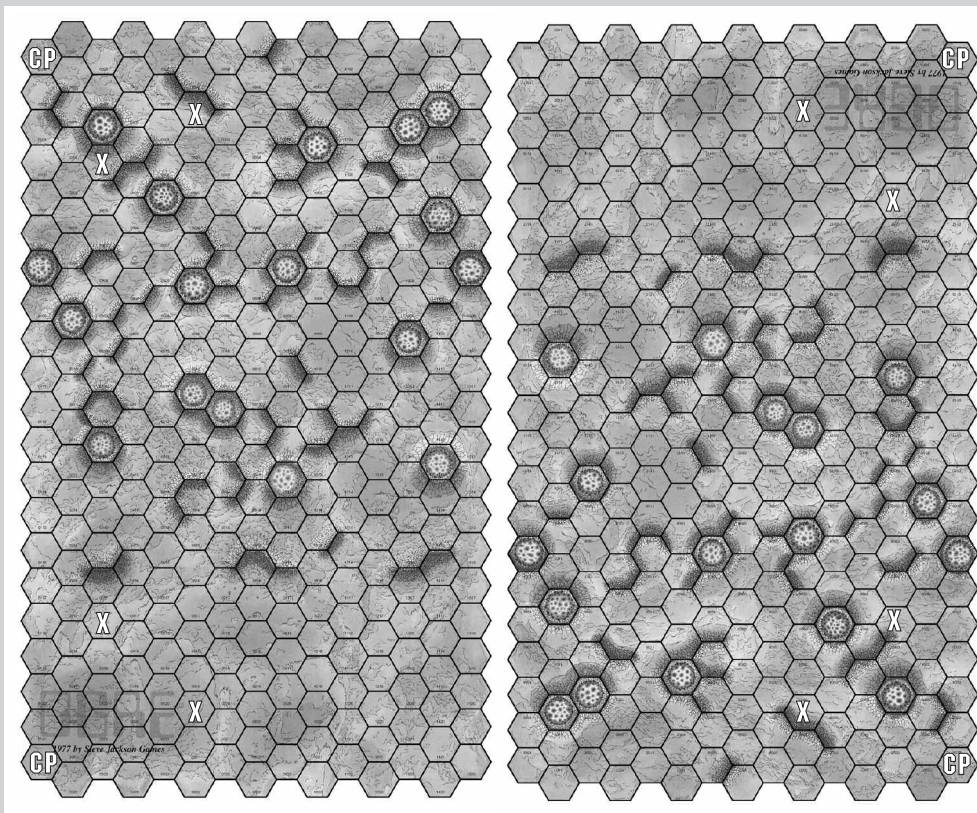
45 Tread Units

●●●○○ ○○○○○ ○○○○○ (M2)

○○○○○ ○○○○○ ○○○○○ (M1)

○○○○○ ○○○○○ ○○○○○ (M0)

**Map layout  
for Exercise K –  
see next page.**





**T**his scenario was originally written for the Kadokawa Shoten “Table Talk” conventions held in Tokyo and Osaka in 1992, at which I had the great honor to be a guest . . . my first and only visit to Japan. We played with 12 individually-painted Ogre miniatures, using the beautiful Geo-Hex *Ogre* boards created by Darell Phillips.

“Exercise K” appeared in print in the second issue of *Last Province*, an excellent British magazine which, unfortunately, did not last very long. I still think it is a great convention scenario, especially with miniatures, but it does work perfectly well with paper maps and cardboard counters.

# EXERCISE K

## A 12-PLAYER SCENARIO FOR *Ogre*

by Steve Jackson

“Exercise K” is a convention scenario designed for 12 players (!) and a referee. It does not represent a real battle, but a computer simulation designed to test the skills of the Ogres and of the programmers who create their strategies. The Ogres are divided into four teams and fight until only one side is left. They are fighting, not only to destroy the foe, but to defend their Command Posts and radar installations.

The scenario is written for use with the original (hex-based) rules, but is intended for use with a large board and metal miniatures. It would be quite possible to play on a regular gameboard with cardboard counters, but – in addition to the difficulty of getting a dozen people around a small board – it loses a lot of its drama on the small scale. It would also be quite possible to play using the miniatures version of the rules, on a square gameboard with any sort of terrain.

### REFeree

A referee is desirable, not so much to mediate rules as to keep the large number of players organized and keep score when units are destroyed. A score sheet should be made up in advance. It will also be necessary to keep track of what round it is, because of the bonus point system (see below).

It is fun, if the game is being played as a convention display, to make up poster-sized versions of the scoresheet and post the *Ogre* record sheets where everybody can see them, updating them every round as points are scored.

### MAP AND SETUP

Use two *Ogre* maps placed side by side, one right-side-up and one upside-down, so the crater end of one

map is beside the open end of the other. Units can move freely between maps. When two *Ogre* maps are placed exactly side by side, this will create a new central line of hexes between the maps (shown on the diagram on the opposite page). These count as normal hexes.

Remember that Ogres cannot enter crater hexes. They can enter all other hexes on the board. Only complete hexes count, not the partial hexes at the edges of the board.

### UNITS

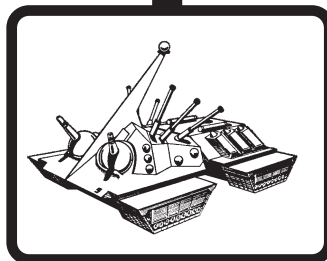
There are four teams, with three Ogres each. Either Mark IIIs or Mark Vs may be used – or teams may have a Mark V leader and two Mark III units.

Teams should be designated by color: Red, Blue, Green and Gold. (If miniatures are used on standard 1.5” hexes, remember that the *Ogre* is considered to be in the map-hex occupied by its front, and the direction in which the *Ogre* faces does not matter to the game.)

The units on each team are designated as 1, 2 and 3. Unit 1 of each team is the leader. So Red 1 is the leader of the Red team, and so on.

Each team also has a Command Post (defense strength 0) and two radars (defense strength 2) which it must defend. The Command Post is destroyed by any attack, but the radars are destroyed only by an X result or by being rammed by an *Ogre*.

Each team starts in one corner of the board. The Command Post is placed in the corner, shown by “CP” above, and all Ogres must start out within 7 hexes of their own CP. The antennas are placed 5 hexes from the CP, and 4 hexes apart, as shown by the “X” marks above.



## PHASING

Choose randomly which team will go first. The members of a team do not move together! The leader of one team goes first; then the leader of the next team, moving clockwise; and so on around the board. When all the leaders have moved, Unit 2 of each team moves, then Unit 3.

Allied units may NOT combine fire. Thus, each unit takes its own fire phase immediately after its movement phase. (In variants where one player controls several units, the units controlled by a single player may combine fire.)

After all 12 players have moved and fired, a round is over and the next round begins.

## SPECIAL RULES

Diplomacy is legal, but there is no penalty for breaking an agreement.

Use *Ogre* ramming rules, not *G.E.V.* overrun rules.

None of the optional rules from *Ogre* Section 8 are used.

Destroyed Ogres are removed from the board. Ogres which lose all their treads may be marked with cotton smoke.

## OBJECTIVES

The game is over when only one team survives; units may not move off the board. However, with 12 players, this may take four hours or more. If the game is played with a time limit, play to the end of a complete round, so players have the same number of moves, and end the game.

The winning team is the one that has scored the most points – this will not necessarily be the survivor, though there is a point bonus for survival!

## POINTS

Each unit scores points individually. A team's score is the total of the score for its three units. The winning team is the team with the highest total score.

- For unit destruction: standard points, as per *G.E.V.* (see below). No points are scored for attacking friendly units!

- Destroying an enemy Main Battery: 8 points.
- Destroying an enemy Secondary Battery: 4 points.
- Destroying an enemy Missile: 1 point.
- Destroying an enemy AP battery: 1 point.
- Destroying an enemy Tread Unit: 1 point.
- For destroying an enemy CP: 60 points.
- For destroying an enemy radar: 20 points.
- If your own team's CP is lost: -20 points for each of the players on the team.

- For firing the shot that finishes the destruction of an enemy Ogre: 20 points.

- For surviving at the end of the game, when all enemy Ogres are destroyed: 20 points.

- For each unused missile at the end of the game: 1 point.

## BONUS POINTS

Kills scored during the first 15 rounds are worth extra:

- All points scored during the first 10 rounds count double.

- All points scored during the following 5 rounds count 50% extra.

- Penalties for losing your own command post are not multiplied if the CP is lost within the first 15 rounds.

## ELABORATIONS

The game can be played with fewer than 12. With only two players, let each control one team of Ogres, facing each other across the crater-strewn diagonal. With six players, use the same setup, but let each player control an individual Ogre. With four players, use the scenario as described, but each player controls a 3-Ogre team. With eight players, use four teams; each player controls one Ogre, while the third cyber-tank on each team is controlled by consensus of the two "live" players (and is, no doubt, the first to be sacrificed).

At the cost of making the game longer, regular armor units can be added. Each team can be given an armor and/or infantry force to support the Ogres. This may be handled several ways:

- Put a fourth player on each team, controlling a small-unit force of 60 points. (This can make the game really long.)

- Give each player 20 armor points to control, in addition to his Ogre. (With unskilled players, this can take almost as long.)

- Let each team consist of three players – two Ogres and a force of 100 armor points.

## LASER TOWER VARIATION

Try adding a Laser Tower in the middle of the board. The first Ogre to come adjacent to the tower controls it for the rest of the game. It fires on the owning player's turn; its range covers the entire board but it cannot fire on structures. It automatically destroys any Ogre missile fired at it; this is not a standard rule, but is fun in the scenario. For this scenario, the tower should be very tough – at least 60 structure points. (It might be better to give it a range that falls just short of the radars, making the corners of the board "safe zones" for Ogres, but we've never tried that.) The Laser Tower is worth 40 points if destroyed, with no bonus for the round – so one strategy is not to take over the tower, but to kill it for the points.

Another Laser Tower variation: Substitute a Laser Tower for each Command Post; it's controlled by the team leader. Keep its point value that of the CP, but make it much harder to kill. Limit its range so that the closest enemy structure is just out of range – the exact distance will depend on whether the board's "margin" hexes are being used.

## BACKGROUND NOTES

"Exercise K" started off as an attempt to do the ridiculous: create a balanced and symmetrical scenario for 12 players in *Ogre*. Multi-player convention games are a lot of fun, but the traditional way to do a multi-player wargame involves two sides and a hierarchy, or lots of independent players. I wanted a compromise – thus, four teams of three.

This in itself is not ridiculous – as a game. But justifying it in real life . . . now, that IS ridiculous. Wars don't happen that way. One obvious explanation was "ritual battle" or perhaps "entertainment for the masses." That would work in some backgrounds, but it didn't make any sense in the context of *Ogre*. The world of *Ogre* is one where superpowers fight a worldwide battle to grind each other down. Even the giant fighting machines are pawns. But they're not pawns to be thrown away in arena games; they're pawns to be sent against the enemy. There's no way that a dozen Ogres – machines as expensive as warships – would be wasted in entertainment.

But that led me to the key idea. Ogres would be too valuable to waste in any situation at all – even testing. Yet military equipment has to be tested, and an artificial intelligence designed to control a supertank would have to be tested most rigorously. But – it wouldn't have to be tested "live!"

So all of Exercise K is really taking place in a few second's time in the electronic mind of a Combine supercomputer. Each of the 12 Ogres is controlled by a different artificial intelligence – a candidate, if you will. Those programs that do best will graduate into the real world, to be duplicated and installed in real cybertanks. Those that fail will be modified or discarded.

With a sufficiently flexible AI program, in fact, battles like Exercise K might not be merely evaluations. They could represent actual training, giving the machine the chance to learn on its own even more than its programmers conceived of. Writing this scenario, and watching it played, helped clarify the *Ogre* world in my mind. This is the sort of deadly serious "game" that will have to be played by both the robots and their creators, a million times a day, in the vast arenas of cyberspace.

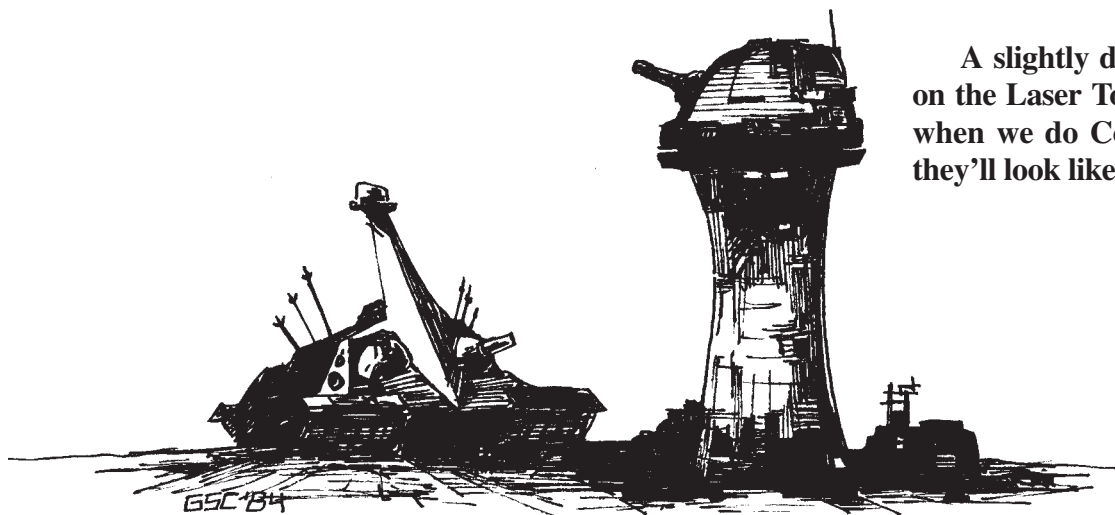
But, here and now, the game is played not by robot intelligences, but by flesh and blood. How does it go?

Usually, pretty well; I've found it as much fun to watch as it is to play. Interactions between opponents are fascinating. A typical one-on-one encounter is a violent charge, with missiles fired at long range, guns blazing as the distance shortens, and then a series of destructive rams until one Ogre can no longer move. But the obvious tactic isn't always the best, especially when Ogres start out equal. In particular, passing up a chance to ram can sometimes throw the foe totally off balance, and it's often better to hit and run than to stay around for mutual annihilation. It depends on the strategic situation. Tactically, mutual annihilation is worth a lot of points to both players!

The dynamics of team play are also interesting. It's a truism that cooperation is better than separate effort. But there's always one team that forgets that until too late, and is defeated in detail. On the other hand, a team that tries to cooperate simply by sticking together will be unable to protect its rear areas unless it just parks on them – in which case it will score no points. And the scenario can reward self-sacrifice. There will be times when an Ogre faces two or three opponents. It will go down. But if played well, it can not only delay the enemy, but it can score a lot of points before it dies – possibly more than its teammates who survive.

Inter-team dynamics are just as complex. Negotiating an alliance can be a good thing. But you score no points unless you fight, and you score more points if you fight quickly. The optimum solution will involve controlling the site of the inevitable battle – keeping it far from your vulnerable rear areas – and, if possible, limping home afterward to protect your base from other survivors.

All in all, I think the scenario has even more possibilities than we've explored so far. I plan to keep running it at conventions, and I'll welcome correspondence from referees or players who try new variations or make interesting discoveries.

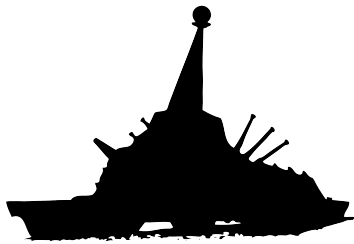


A slightly different take on the Laser Tower. Maybe when we do Combine one, they'll look like this.



# SCORE SHEET FOR EXERCISE K

|          | RED   |       |       | BLUE  |       |       | GREEN |       |       | GOLD  |       |       |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|          | 1     | 2     | 3     | 1     | 2     | 3     | 1     | 2     | 3     | 1     | 2     | 3     |
| Round 1  | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 2  | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 3  | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 4  | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 5  | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 6  | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 7  | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 8  | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 9  | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 10 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 11 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 12 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 13 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 14 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 15 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 16 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 17 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 18 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 19 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 20 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 21 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 22 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 23 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 24 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Round 25 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |



**T**he Paneuropean Fencer, as first drawn by Mike Naylor, is long and lean, very different from the Ogre but very menacing in its own way. When the miniature, sculpted by Jeff Wilhelm, first appeared, there was immediate demand for Fencer scenarios. This one may look a lot like

the original game . . . same map, similar objective, different cybertank. But it has a very different feel to it. The Fencer is fast; the escorting GEVs are lightning; the Fencer missiles wipe out foes with great authority . . . this battle develops quickly.

# FENCER ATTACK

By Steve Jackson

“Fencer Attack” is played on the original *Ogre* map. It’s a variation of the classic “Advanced” (Mark V) scenario.

**Attacking Force:** A single Paneuropean Fencer, escorted by four GEVs, entering from the bottom of the map after the defense sets up, and moving first.

**Defending Force:** Exactly as per the *Ogre* advanced scenario: 20 armor units, 30 infantry, set up as described in the *Ogre* rules. However, the defender gets *two* targets to protect: one CP, one jamscreen. Either can be completely destroyed either by ramming or by one shot from any of the Fencer’s weapons, including its AP. The defender should place one in each top corner of the map.

**Special Rules:** The GEVs can destroy the CP or jamscreen by weapon fire but not by ramming them; they’re not *that* flimsy.

**Victory Conditions:** These are based wholly on the survival (or escape) of the Fencer, and the destruction (or survival) of the two objectives.

- Fencer destroys both objectives and escapes: *Unbelievable victory.*

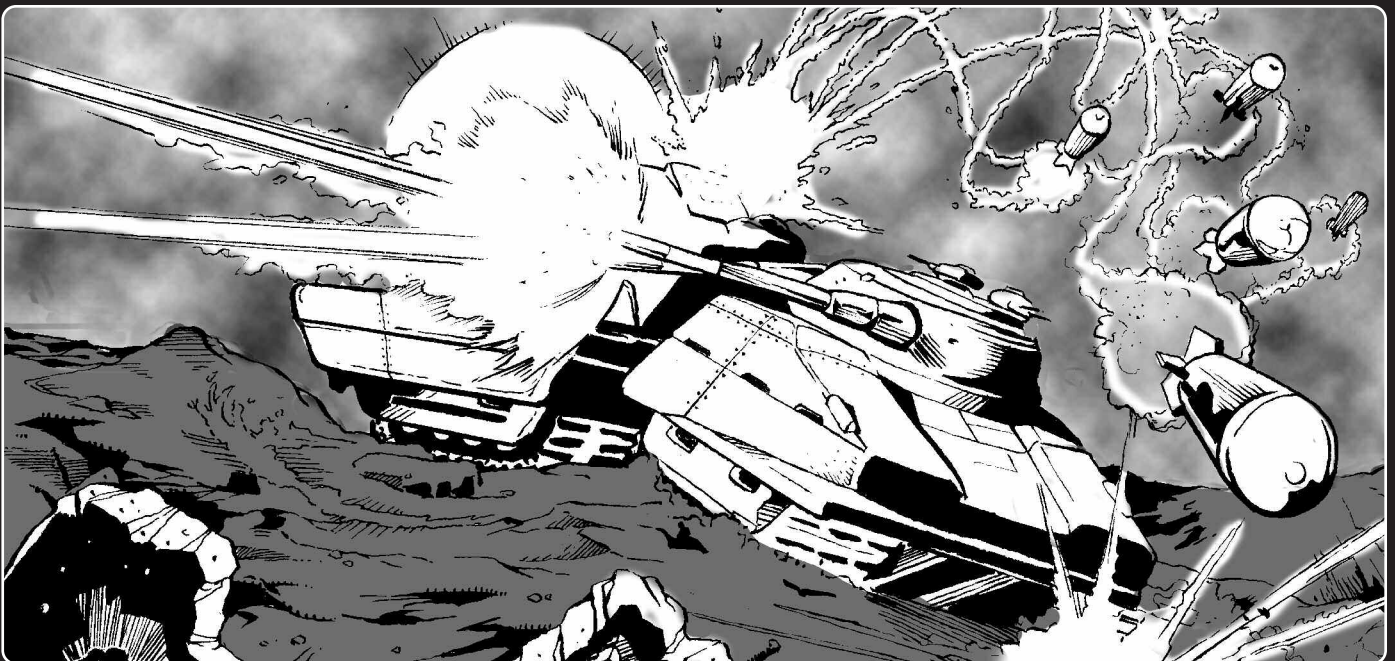
- Fencer destroys both, and is destroyed: *Victory.*

- Fencer destroys one objective and escapes: *Marginal victory.*

- Fencer destroys one objective and is destroyed: *Marginal defeat.*

- Fencer destroys no objectives but escapes: *Ignominious retreat.*

- Fencer destroys no objectives and is destroyed: *Total humiliation.*



For tournament play, a match should consist of two games, so that each player attacks once and defends once. The winner is the player who scores better as the attacker. As a tiebreaker, keep track of damage to the Fencers and armor units, to determine who did marginally better in a close match.

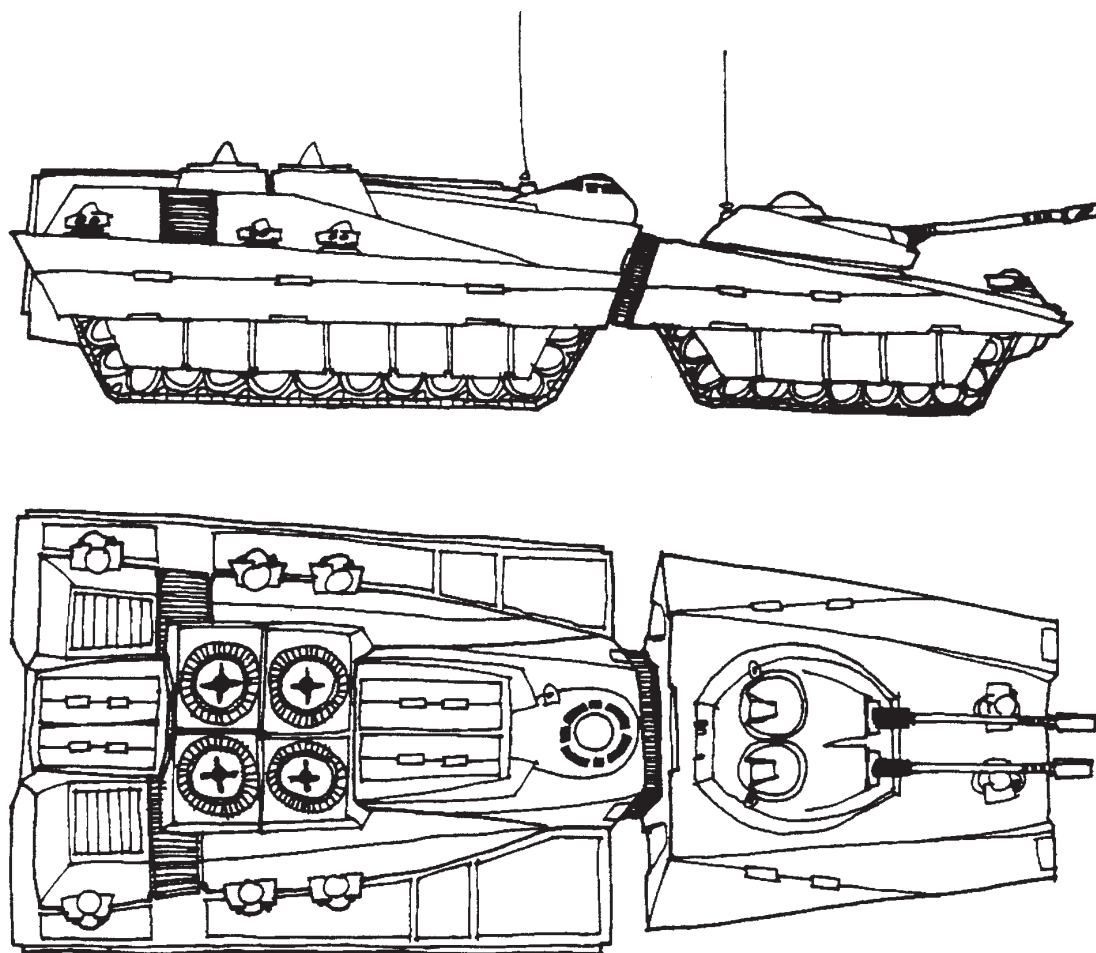
**Adjusting Game Balance:** The most interesting way to adjust the balance is to vary the number of escorting GEVs on the attacking side. A more subtle adjustment is to allow the defender to use Mobile Howitzers and Light Tanks as well as the original *Ogre* armor units; this gives the defense more flexibility. Light GEVs are *not* recommended for this scenario; if the defender can use a “Fuzzy Wuzzy” strategy, with a dozen or more LGEVs, the Fencer will run out of missiles before it swats all the gnats!



**Strategy Notes:** The Fencer is not a melee fighter; it's a long-distance sniper. If the defenders can mob it, its missile racks will soon be gone. The escorting GEVs can be valuable out of proportion to their firepower, either as a screen or as a separate maneuver element to provide a distraction and keep the defender from concentrating his forces.

The defender, in turn, should try to concentrate his units and surround the invading cybertank, while keeping enough reserves to protect against an end run by the GEVs. Good use of the slow, short-range infantry can make the difference in this game.

Unlike the Mark III and Mark V scenarios, this game rarely comes down to the wire, with a crippled cybertank straining to move that one last hex to its goal. Either the Fencer is crippled long before it threatens its second objective, or it waltzes all over the defenders.



Mike Naylor's concept sketches for the Fencer.



This is based on a scenario created by Garth Getgen, which he called “Kill the Howitzer.” It’s on our website, at [www.sjgames.com/ogre/scenarios/killhwz.html](http://www.sjgames.com/ogre/scenarios/killhwz.html). I really like it as an intellectual exercise, but

I wanted more of a rationale . . . so I set out to write a story that would explain it. Why would soldiers throw themselves away like this? Because the scenario is not a story in itself, but the last act of a tragedy . . .

# APPOINTMENT WITH GLORY

## By Steve Jackson

The lines faced each other as they had for months. The superpowers were thinly stretched, here on the Spanish plains. Chains of artillery, guarded by infantry and the tired remnants of broken units, marked the boundaries. For the most part, the front was quiet. Raids required armored forces, in good working order, and men with the will to glory. There was little of that in Spain in the fall of 2083.

But General LeClerc was proud and ambitious. If all he had was infantry then, for the glory of La Belle Patrie, he would attack with infantry. If he had nothing to mount them on but trucks, well, they would ride trucks. It would be the more unexpected, yes?

So two battalions of infantry were scraped up from a long sector of front, and matched up with a ragged assortment of transport. A carefully-timed sabotage scare distracted the Combine’s meager reserve force. And 16 assorted hovercraft, all the general could spare and a dozen he couldn’t, went skidding across the plains to wipe away the enemy’s forward defenses and open a safe path for the trucks.

As they crossed an old battlefield, they found glory a bit sooner than they had expected. The Ogre was crippled; it had spent more than two years buried under tons of rubble and mud. Sapper teams should have found it and killed it. But it escaped notice, husbanding its strength. It couldn’t move; it couldn’t fight. It lay broken, and listened.

When its sensors detected the enemy force passing its grave, the wounded machine took very little time to make its last decision. Its three remaining guns salvo-fired and exploded. Self-destruct charges cracked its power plant, making the detonation hot and dirty.

The mountain of rubble bulged, spat fire, and found a new shape. In an eyblink, the little force was halved.

The General wept as the survivors reported by radio . . . and wept again when they refused to turn back. “The operation is already in motion, sir!” said the senior officer, all of 24 years old. “We cannot stop now. We still have

enough force to take out one howitzer. That will leave an opening for the trucks.”

And across the Spanish plains flew eight hovercraft, trailing plumes of dust like banners. They were late for their own appointment with glory, but if they hurried, they could still make it.



## SCENARIO SETUP

The defender chooses the terrain. He specifies which map will be used – *G.E.V.* or *Shockwave*.

The attacker then chooses his axis of advance. He declares which map-edge (N/E/S/W) his forces – 4 GEVs and 4 LGEVs – will enter on.

The defender sets up his units: 2 Howitzers, 4 Light Tanks, and 18 squads of infantry. The howitzers must be placed so their overlapping fields of fire completely block the path between the attacker’s chosen map-edge and the opposite one. The other units may be placed wherever the defender thinks they can best defend the howitzers.

The attacker moves first, entering any or all of his units along the map-edge declared in step 2. Units which don’t enter on the first turn may enter on any later turn.

There are no reinforcements. No unit may leave the map. All towns/bridges are intact unless the players agree otherwise.

## VICTORY CONDITIONS

The attacker has one hour (15 turns) in which to take out at least one howitzer. Nothing else matters. If a howitzer is destroyed, the attacker has won, though the players may continue to see what else happens (eliminating the second howitzer would be a coup indeed!). The defender wins by preserving both of his howitzers through 15 attacker turns.

This is a sequel to Bell's story "G.E.V." (p. 37). It's completely non-canon; I think the "Federals" might equate best to the Combine, and the "Alliance" to the Paneuropeans, but the course of the war Bell describes is nothing like the history of the Last War as we know it.

When the story was first published, it was even more non-canon, because it dealt with self-aware Ogres . . . monstrous rogue Ogres with their own agenda. In 1980, when this story was first published, I hadn't yet decided to extend the future history to the point where Ogres became sentient.

The official timeline still contains no reports of Ogres uniting to enslave humans, and it certainly didn't happen before the end of the Last War. But afterwards, while the Factory States were pulling themselves together, who's to say that something very like this might not have happened?

This was the first game appearance of the GEV-PC and hovertruck. To avoid confusion, the text for the new units has been edited to conform with current game rules; to play the scenario as originally created, give the GEVs a 3/3 move, and the hovertrucks a slowpoke 3 with no second phase.

## END GAME

by J.D. Bell

I woke before sunrise. The wind gently shifted the pines. It toyed with the burn dressings on my arm. Nothing else was moving but the river, water speckled with dead leaves. Above, the sky was innocent of clouds or contrails. The only air cover was a late night bird, sleepily returning to its roost. By my watch it was 0600 hours, the two-thousand five hundred and sixth day of World War III, my 26th birthday.

I went over to the laager and took a tin of hot afrika coffee from the fire. Then I climbed into the command hover. Jan was on watch, listening to three bands and catching the readouts on five more. I tapped her shoulder.

"Any luck?" She shook her head and returned to the screens.

Denys was strapped to a bunk nearby, in case we had to lift and run. We had taped his hands to keep him from picking the scabs in his sleep. His head was naked as an egg. There was a raw patch of grafted skin where his ear had been. When we stripped the comhelm off him, a lot of flesh had come with it.

Outside, Major Willovs squatted at the fire, warming flesh chilled by night recon. Her face was still striped with nightpaint. Her hair was greased into a long braid, wrapped into a plastic sheath. I sat beside her and finished my coffee.

"Anything stirring?"

"Nothing, colonel. Spent half the night sneaking up on a village about ten klicks this side of Viella. Nothing but corpses. Forty in the streets. No IR traces."

Absentmindedly she rubbed a sore on her cheek. It made me wonder how long we would last, camped out

like this with our wounds and our rad dosages, with food low and winter closing in.

"A standing village. Any fighting there?"

She shrugged. "A few signs. A wreck in the square. A few houses gutted."

The fire popped. I scratched a rash under my belt. "We ought to check it out. If there isn't a lot of rad or toxin, we could set up there till spring."



She shrugged. "Colonel, if you ask me, one grave is as good as the next."

That didn't sound like Willovs. Too much night recon, I thought.

"Pack it in, major. Sleep till noon."

"Yes, sir!" She lay down where she sat and was out like someone had drugged her.

I sat a little longer by the fire, listening to the familiar, little noises of the waking laager. I was thinking about our six years in the hovercraft, living in a six cubic meter can for weeks; watching friends disappear in eye-burning flashes; huddling in our cans at night with the MI around us, waiting for Alliance commandos to try to sneak in with their nightpaint and their mini-nukes; taking drugs to suppress hunger, sex, fatigue, shock, pain, hysteria . . . sometimes drugs to suppress drugs.

No one cares to remember just when it happened. The Federal Expeditionary Forces ran into more Alliance Ogres and mechs than anyone had seen in six years. Six commands were vaporized in 90 minutes; then we broke. Out of a reinforced brigade, four hovercraft made it to a valley on the French side of the Pyrenees – Mateland, Borslov, Timmen, and myself.

There was no more rear, no headquarters, no one to report to. I established laser contact with the orbitals, and almost wished I hadn't. The Alliance had hit the Western Hemisphere with a classic strike over the Arctic, and hit the orbitals with something more innovative – reactor waste dumped in orbit. Men and electronics were dying. As they died, they were systematically blistering the Alliance homelands, firing by mapgrid. Here, in this little valley, I could see the north sky glow. I could hear the thunder rumble, and every rumble was a million human lives.

There was nowhere to appeal. L-5 was neutral. Asia was still glowing from the Alliance strike of Year Three. Africa was desert, savanna, and jungle, and blisterglass where orbitals had targeted the cities. There was no one left to see the show, no one who gave a damn about the death of the Federal army in Europe.

MI kept trickling into the laager, three men from a division, fourteen from a reserve company. The last group said they had seen Alliance mechs fighting an Ogre. I shook my head. I didn't think the Federation had an Ogre to its name anymore.

I wanted to leave the matter alone. But chance would not have it so.

First we heard the low-frequency thunder of an Ogre, an unforgettable sound. I told Willovs to get the MI suited up. Soon, we could see the blue-white flare of hiveloc rounds, and hear the rain of glass pellets condensing from the contrails.

It was an Alliance Mk. V, chasing about 30 Alliance hovercraft. Helluva sight. It was battered, missiles gone or fused to the shell, sensors pocked with hits. It was methodically chopping up GEVs, like a bear fighting a pack of lapdogs.

"Christ!" said Borslov.

I said, "I don't see the dish." I fumbled with the



binocs. There was blackened metal behind the Ogre's main battery, where the dish should have been.

Mateland raised his eyes from his zess-scope. "Most of the externals are gone, but it's destroying those hovers."

"Good!" said Borslov. "Their own demon should destroy them!" He laughed.

I said, "Mount the troop." And then, to explain, "It will be targeting us before long."

Mateland winced. "Right. MOUNT 'EM!" He kicked a pine bough off his turret.

I grabbed Willovs, pointed to a crest a hundred meters down the valley. "Get your apes . . ."

She nodded and they were gone, eating up meters with each bound. Impossible to tell the men from the women.

I ran to my hover and slammed the hatch behind me. Jan already had the turbines spinning.

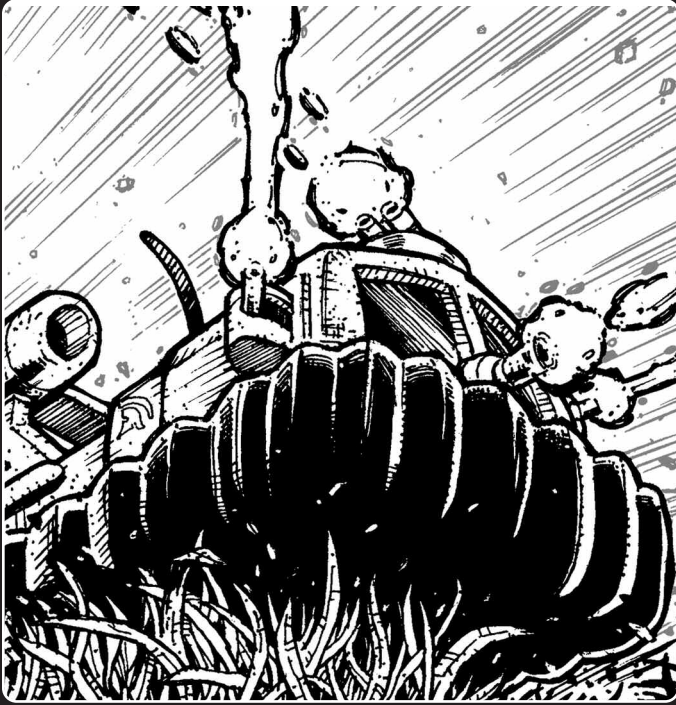
"Seal her!" My ears popped with the sudden pressure.

"Let her go!" Again, the familiar, comforting vibration of a live hover. I looked at the screens. We were swinging in from behind, nine clicks from the Ogre. At 200 KPH, we would be on top of it in one-sixty seconds. I wanted to fire at one-five seconds.

"Troop leader to all. Arm your hotshots. Set seekers for IR trace. I'll paint it with a laser. Fire on impulse. We'll all be dosed after the strike, so splash down in the river." I nudged the hover into the swamp the treads had created.

The secondaries started tracking us at five clicks. With a roar, the swamp ahead of us turned vertical. We drove into a cloud of water and muck. I glanced at the screens. Still four blips on our side. No hits, at that range.





Suddenly, I had visual again. The Ogre was turning into us, bringing its primaries to bear.

Borslov broke channel, singing in his high tenor, "*Dies irae, dies illa . . .*"

Timmen kicked in his afterburner and dashed ahead. He started to jack and weave, laying down a roostertail of mud and debris to screen the rest of us. I could never have ordered anyone to do that.

"Unmask batteries." I heard the whine through my helm as our missiles rolled into the open. A glance assured me Borslov and Mateland were doing the same.

Timmen wasn't unmasking, for some reason.

"Timmen?"

Sudden blinding flash. A shock felt, not heard. A hiveloc round had hit the lead hover, ripping away a turbine, spinning the 15-ton craft like a tin can, venting the hydrogen tanks in a deadly white cloud.

"Timmen?"

Another hit left purple afterimages, and ignited the hydrogen. Flaming, the hover nosed in the muck, cartwheeled, flew to pieces.

"*Quantus tremor est futurus*," sang Borslov, firing his guns at extreme range, the shells bouncing off the armor of the Ogre. Nameless fragments of Timmen's hover danced among us. "*Quando iadex est venturus . . .*"

"Ten seconds, acknowledge!"

"On pipe!" Mateland.

"*Lacrimosa dies illa*," Borslov.

"Yo!" Timmen, his voice in my head, not on the phones.

I painted the Ogre, aiming for the blackened spot behind the primaries.

"*Qua resurgent ex favilla iudicandus homo reus, huic ergo parce Deus*."

I hit the impulse. The missiles kicked off. When they hit, there'd be the equivalent of three thousand tons of TNT, a fireball hotter than the sun pricking the skin of the Ogre. The transitory bottle effect of the implosion would direct most of the force downwards, in theory. But the spillover could kill us.

Borslov and I broke right, almost rolling the hovers like fighters. My board turned red as the airducts hit bottom. A hiveloc exploded in the muck in front of my machine. My board went dead. We hit a six-meter splash of mud, rock, and water. I heard the engine rip itself apart, trying to digest rocks at 90,000 rpm, spraying steel fragments even-handedly through hardware, crew, and armor.

The hover spun completely around. I glimpsed the Ogre, its secondaries elevated, futilely trying to destroy the incoming missiles. By reflex, I hit the trigger, pumping a round into the treads.

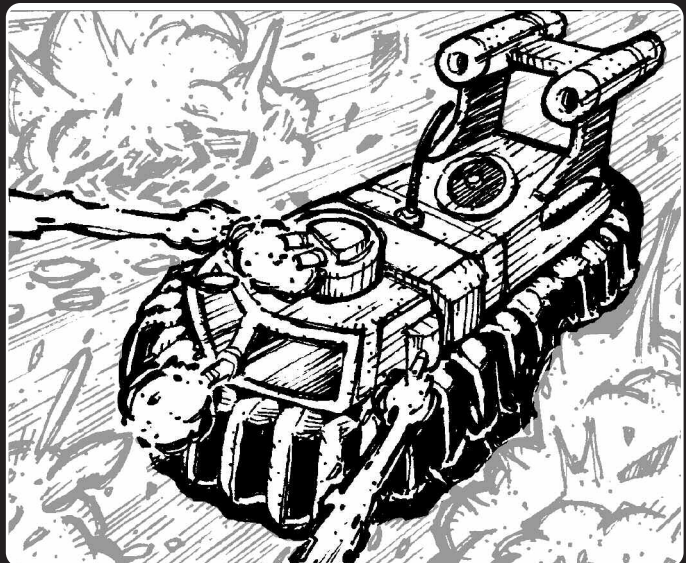
Then the missiles hit. The blast scattered Ogre treads like dry leaves. A wave of rock and water rose from the insulted earth, boiling, turning into superheated steam and white-hot fragments. Then the shock wave hit me.

I woke in the water, coughing. The blast had popped the crew compartment like a blister. Half-choking with water in my lungs, I scrambled through waist-deep mud, mixed with pieces of bulkhead, instrument boards, seat cushions. I almost brushed Jan aside. She was unconscious, lying half out of the muck, her helm black and shot with bubbles where a lick of fire had touched it. I dragged us both away from the burning hover.

A little, mindless eternity later, I came to realize that I was walking on dry land. Or dry enough. We were on a sand spit a few hundred meters from the hover. I sat us down and tried to estimate what was left of myself and the people who followed me.

My body felt reasonably intact. A few new burns, a few abrasions. Before the war, I would have been rushed to a hospital. Now, still fully equipped with limbs and organs, I rated myself active.

Willovs and her MI were still moving down the valley.



Borslov's hover had hit a clump of fir trees. It was burning like magnesium dropped into a wood stove. *Pie Iesu domine, dona eis requiem.* Mateland had splashed down too late. A little spot of bubbling water marked his hover.

A few kilometers downstream, at the base of a tower of steam and smoke, the Ogre burned. Cracked open like a monstrous egg, it spewed its guts into the sky. I couldn't look at the fire within that cloud. My eyes ran. I brushed my face, and my hand came back bloody.

Gunfire. Someone was shooting. There was a hand sticking out of the water by Mateland's hover, clutching a sidearm. It emptied the clip into the air before I understood.

I hit the water. Getting ahold of him was hard. He struggled, and gasped horribly when I got his head out of the water.

It was Mateland. There was a bucket seat wrapped around his legs, folded as neatly as paper around a package. He smelled of oil and river bottom and burnt flesh.

I hauled him out and unpeeled the bucket seat. He lay there and grinned at me. The pistol was still in his hand.

"Colonel, I went and pranged my hover." He pulled a steel fragment from the toe of his boot. "You think they'll accept this as evidence?"

"Most irregular. Charges will be drawn, Major. Consider yourself under arrest."

Somehow we were laughing. It was good to be alive.

Then, two things stopped at the same time – Jan's breathing and my laughter. Feeling a little guilty, I placed her body in a more comfortable position.

Then I looked around to see what was keeping Willovs.

About a kilometer upstream, the last five Alliance hovercraft were grounded. The crews were dismounted. Some had simply collapsed. Some were clustered around the command hover in the center.

Willovs was moving in on this pathetic scene. A by-the-book envelopment.

Mateland reloaded his pistol, as if it really mattered. "We going to hit them?"

"In a way. I'm going to ask for their surrender. Can you walk?"

He got up, cursing.

"Such language."

I managed to catch Willow's attention and waved her back. Together, with such dignity as we could present, Mateland and I limped into the Alliance camp.

The Alliance soldiers watched us come, most with blank indifference. They sat around their hovers, staring at the Ogre burning downstream.

The command hover had been pranged. It looked like a tin can hit by a shotgun. Lying against the crumpled airskirts was a man in the uniform of a brigadier general. Kneeling beside him, a couple of medics were grimly trying to plug up a chest wound.

Around him were some people in black tunics; battlewebbing loaded with gear. Commandos. They held their



weapons loosely, aiming at points between my navel and forehead. Last I heard of commandos, some two-star clerk had produced a liesheet saying they weren't on the Alliance TO, because in six years not one had been captured.

As I approached the general, one whirled and held a knife to my throat. Moving slowly, I glanced upslope, where Willovs and her apes had planted themselves, covering us with automatic weapons and missile packs. The commando followed my glance and almost nicked me in surprise. Probably the first time anyone had got the drop on him.

Gently, I brushed aside the knife and knelt beside the general.

"Colonel Rein, 53rd Federal Recon. I respectfully request your surrender."

He opened his eyes. They were white-pupiled, sightless. His whole face was blistered, up to a neat line on his brows where the helm had been.

A medic started to stick a needle in his arm. He brushed it off like a mosquito.

I swallowed. A word and the commandos would butcher me.

He was trying to say something. From between those blistered lips came a whisper of passable English.

"Did you . . . did you kill it?"

"Yes, sir. Split it open with MSC warheads. It's burning now."



"Good." He coughed. A couple of drops of blood came to his lips. Then the words flowed furiously. "Good . . . I wish . . . a mutiny, Colonel . . . damned mutiny . . . lost programmer. . . inhuman. . . There were no more words. He was coughing badly. A punctured lung, I thought. The medic tried to needle him again, and this time succeeded.

I said, "Rest, General. We can talk later."

He lay back and looked at me. His complete calmness scared me. I had seen it before.

"There is no later . . . I surrender . . . forces . . . kill me another . . . Colonel . . . kill . . ." He coughed and the coughing became a spasm. One medic reached for an oxygen mask. The other prepared a needle. But it soon became apparent they were treating a corpse.

I stood up. "Who is senior here?"

The commando who had grabbed me earlier stood forward. "I am. Major Volt. Special commando, assigned to the General Staff."

"You are my prisoner." I held out my hand for his weapon. Hesitantly, he gave it to me. Good.

"Muster your troops. Report numbers and condition."

"Yes, sir."

I waited for the salute. It came. And he didn't knife me when I turned by back. Another good sign.

An Alliance tech was bandaging Mateland's foot. Another was holding his gun for him. Both of these techs were female. Plainly, Mateland was himself again.

I took the gun from the tech and threw it into Mateland's gut, hard. He oofed.

"How are you feeling?"

"Topline, until you targeted me."

"Don't frat with the prisoners, not until you're sure who is whose." I felt a little sorry about the gun. Only a little. "Get your boot back on. Go tell Willows to bring in her apes. We're going to lift out of here."

Mateland saluted. "Damn, Colonel, I'm in the army again."

Volt came to a brace in front of me.

"Reporting."

"Proceed."

"35 effectives, 12 wounded. 20 of the effectives are tech or service. 15 are commando or liftpanzer."

"What's the passenger rating on the hovers?"

"Except for the command hover, what we have left are hovertrucks, which can hold 15 passengers each."

"Hmm, some of the M1 are going to have to ride on top. Get ready to lift."

Volt barked something in his own language. Suddenly, everyone was busy. Four liftpanzer ratings clambered into their seats, while their buddies did the outside check. The medics did some last-minute work on the wounded, before they were bundled for travel.

In the middle of this bustle, I stood there, examining the weapon Volt had given me. A 10mm machine pistol with nightscope and flash suppressor, and a clip full of explosive rounds. Nasty thing.

"Sir?" said Volt.

"Mmmn?"

"May I inquire my status?"

Yes, it was time to settle that. I held the weapon to him, butt first.

"In contravention of the Geneva Accords, I am offering you a commission as captain in the Federal Armed Forces. Do you accept?"

He smiled. "What conditions?"

"None, but a commission will remove you from the protection of the POW accords. If I have to shoot you, it will be legal."

He lost his smile. I could see he was considering the possibilities. What resources did the Federation have left? Just how dead was the Alliance? Did it have a chance of regaining control of the Ogres? Would it be safer to stay a POW?

In the end, he said, "Colonel, you are absolutely insane."

But he took the weapon.

We lifted.

Most of the Alliance people had been assigned to staff. The general had seen the Ogres' electronic minds changing under the effects of radiation, and had gotten his people out. The Alliance General Staff was left without transportation when the mutiny broke.

I shook my head. What a story! And no one to tell it to. I made a mental note to keep our comm bands open. L-5 was sure to send someone to salvage the orbitals, sooner or later.

Among the things I inherited from the general was a box of maps, each stamped TOP SECRET. The terrain was shaded with bright colors – yellow, red and purple – to indicate areas of contamination by toxin, rad and virus. To my surprise, there were quite a few green areas. Blessed by chance, some places hadn't seen a war since the 17th century. There was one in particular I wanted to look at, not too far away . . .

As our little company cleared the lip of the valley, someone broke channel.

"Ogre!"

"All units, halt!"

I went to the screen. There was an Ogre about 25 clicks behind us. It was moving into the radiation zone. Probably didn't see us. I raised hatch and had a look at the thing with the scope.

A Mk. IV. It had stopped about half a kilometer from the dead Ogre. Drones hovered above. There were some kind of vehicles down there, too. I turned up the gain on the scope.

There were hover transport and some civvie trucks. Little figures were getting out and going to work on the dead Ogre with torches, hack saws and bolt cutters. Under the bright orange POW jumpers were the uniforms of Alliance liftpanzer, Federal droptroops, reservists, naval ratings, and others. I felt sick.

Mateland lifted hatch nearby. "What's up?"

"See for yourself."





I got Volt and let him have a look, too. Neither of them said anything.

Willoys came bounding back from the lead hover. "What's going on down there?"

"Slave labor. They're using prisoners for salvage work. In a rad zone."

Willoys half raised her weapon. "What are we going to do?"

"Nothing."

"WHAT?"

Everyone was looking at me.

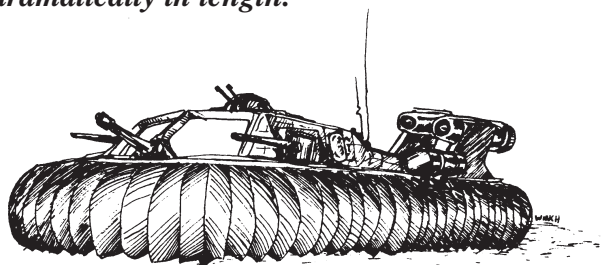
"We're going to sit here and watch while they kill those people. Watch and learn."

"When we're stronger, we'll pick the time and the place and we'll kill one. Then another. And another, until we slag the last of those demons or they fry us."

"Get under cover. Shut down all systems. We're going to wait for a while."

I whispered to myself, "But only for a while."

*Winch Chung's original drawing of the GEV. And this is pretty much how it stayed, except for the guns, which we reduced dramatically in length.*



## "END GAME" SCENARIO

This is a 3-player scenario using the *G.E.V.* map. The area is assumed to have seen a lot of combat. There are no roads, bridges, or railroads. The river bridge is down; all town hexes are rubble. There are three players: Alliance, Federal, and Ogre.

### BEGINNING THE GAME

The Alliance player enters the map anywhere on the north side. All his units enter together (ignore stacking limits in the first turn) and move together (three hexes maximum) the first turn. The Alliance forces are composed of 10 regular GEVs; 8 GEV-PCs; 12 "hovertrucks"; and 6 points of infantry, distributed among the GEV-PCs in any fashion. See New Units, below for explanations of the GEV-PC and hovertruck.

The Ogre player moves second, entering the map after the Alliance player. The Ogre may enter anywhere on the north side. It moves only two hexes its first turn. It is assumed that the Ogre was lying doggo in a forest or

lake, waiting for stragglers. Spotting the Alliance force, it came up behind them – but (possibly hoping to capture some prisoners) did not fire to wipe out the group while it is bunched. Therefore, the Ogre cannot fire its first turn.

The Ogre is a Mark V, moderately damaged. It has no missiles or AP left. It has also lost 6 tread units and two secondary batteries. It therefore retains two main batteries, four secondaries, and 54 tread units.

Starting on his second turn, the Alliance player must observe stacking limits normally. He'd better scatter! Starting on the Ogre's second turn, it may move and fire freely, up to the limits of its remaining abilities.

## FEDERAL PLAYER ENTRY

The third player in the game represents the Federal force. His units (4 ordinary GEVs and 12 points of infantry) begin the game together, in any hex within five hexes of 1516. However, they do not appear on the map at the beginning of the game. The Federal player writes down their location and reveals it when they enter the game.

The Federal player may enter the game on any turn; all his units must enter at once, and immediately begin to observe stacking limits. The Federal player moves after the Ogre; he is the third player to move each turn.

The Federal player must immediately reveal the location of his units at any time that (a) an Alliance unit enters the hex, or (b) the Ogre comes within two hexes of their location. He will usually find it to his advantage to enter the game before circumstances force his hand.

## HUMAN COOPERATION

It is highly unlikely that either human player will be able to achieve victory without help (or at least non-interference) from the other. However, the two human players are supposed to be enemies. The fact that they face a common foe will not immediately erase this. Therefore:

At no time may any human players discuss specific tactics. They may speak to each other in brief and general fashion, i.e., "I'll hit him this turn if you will," or "If you don't attack him, I'll attack YOU." If the Ogre player feels that the humans are communicating too freely, he may jam their communications (so to speak) by limiting each player to ten words of battle-related talk each turn! To be fair, the Ogre should also be permitted ten words a turn of threats, offers, and so on. However, it will rarely benefit a human to cooperate with a renegade Ogre.

If one human's units enter a hex occupied by units of another human player, they are considered to be attempting an overrun attack. Combat must take place. In a battle-field situation, trigger fingers get very itchy.

## LEAVING THE MAP AND ENDING THE GAME

Any unit which leaves the map is out of the game and may not return. The game is over when only one side has units on the map. If you want to end the game, run for the edge of the map; units which leave are not considered destroyed.

## New Units

Two new kinds of units are introduced in this scenario:

### GEV-PCs

The GEV-PC, or personnel carrier, is similar to a standard military GEV, but it has been modified to carry troops. A single GEV-PC can carry up to 3 squads of infantry. Its hovercraft body has been stripped of everything except a small pilot's cupola with a token gun. The body of the craft is flat except for metal "trees" to which the infantry attach themselves.

The GEV-PC has a small gun; strength 1, range 1. It has two movement impulses, like a regular GEV, but it is slightly slower. It can move 3 hexes in the first phase, 2 the second. Its defensive strength is 2.

In order to ride on a GEV-PC, an infantry unit must start in the same hex with it. Infantry may leave the GEV-PC at any time during the GEV-PC's movement, but may not move on its own that turn.

If a GEV-PC carrying infantry is fired on, treat that whole stack as a single unit with a defensive strength of only 1. If the hover is Xed, the troops are also destroyed. If the hover gets a D result, one unit of infantry is lost. Terrain affects GEV-PCs just as though they were regular GEVs, but a D result from terrain does not affect passengers.

### Hovertrucks

The "hovertruck" is a transport hovercraft. There are many kinds; for the purposes of this game, all hovertrucks have a movement of 3 in the first phase, 2 in the second. They have no attack strength. They are thin-skinned and have no point defense; for this scenario, half have a defense value of 0, others of 1. They are

affected by terrain just as though they were regular GEVs. A hovertruck may carry up to 3 units of infantry, but the infantry has no defense strength while riding a hovertruck.

## Victory Conditions

Each player has an entirely different set of objectives, and each player determines victory in a different fashion.

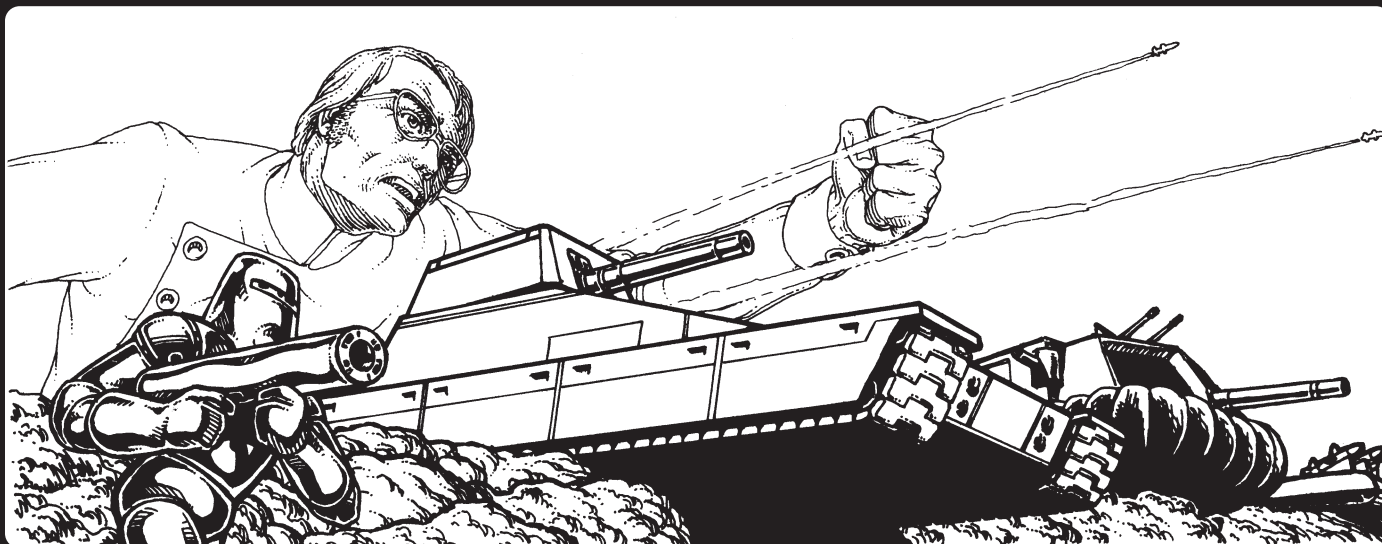
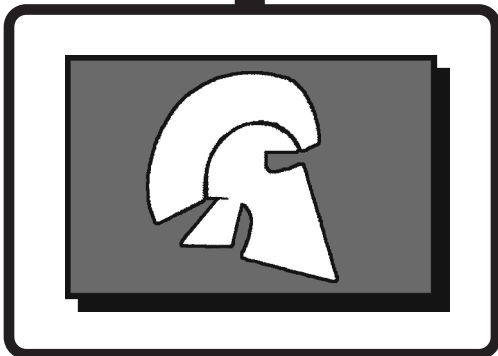
The Alliance player counts victory points as follows: 6 points for each hovercraft (of any kind) that escapes off the south edge of the map. 2 points for each point of infantry that escapes off the south edge. No points for units leaving other edges. The Alliance player also gets points for damage he does to the Ogre, as per the *G.E.V.* rules. His main objective is simply escape and safety – but messing up the Ogre benefits him in that!

The Alliance player scores a marginal victory if he gets 100 victory points. 125 VP gets a substantial victory; 160 or more is a decisive victory.

The Federal player wins a marginal victory if the Ogre is destroyed. (No, this isn't rational; the Federals were fairly berserk at that point.) They win a decisive victory if they can destroy the Ogre while retaining at least one functional GEV. If they can keep more GEVs intact, so much the better! The Ogre is considered "destroyed" if all its guns and treads are shot out.

The Federal player gets no points for destroying Alliance units (or vice versa).

The Ogre's objective is to frustrate or kill the human forces. The Ogre wins a decisive victory if and only if neither human player wins any kind of victory. It wins a marginal victory if it prevents any Alliance victory. That



The author is right: solo play is important. I've talked to literally hundreds of people who worked out ways to

play *Ogre* by themselves. The difference is, George Collins wrote his down and sent it to *Space Gamer*.

was its original mission, and it's only a machine.

# SOLITAIRE *OGRE*

## By George Collins

My biggest disappointment with the game *Ogre* was the lack of detailed rules for solo play, since the game is perfect for it. There is a vague mention of Ogre "programming," in which the player writes down the Ogre's plan of attack in advance. Unfortunately, the game quickly becomes boring, because the defender always knows what to expect from the Ogre. And what fun is a game without surprises?

What is needed are rules which make the Ogre unpredictable but not haphazard. While programming a computer to play *Ogre* I created a set of rules by which you can decide how the Ogre will move and fire, simply by rolling dice. These rules are a compromise between random play and strategy. They work so well that no handicap is needed when playing most scenarios.

### SETUP

The human player always takes the defense. He picks his units and places them in accordance with the scenario he has chosen. The Ogre will enter at the bottom of the map on Turn 1, in the same hex-column as the CP.

### MOVEMENT

If the top of the map is "north," then the Ogre will always move north, northeast, or northwest. Example: If the Ogre is in 2525, it may move NW to 2425, N to 2424, or NE to 2524.

The Ogre will always use all its available movement points. For every hex it is to enter, roll one die. A 1 or 2 means it will move NW. A 3 or 4 mean it will move N. A 5 or 6 mean it will move NE. However:



(a) The Ogre will never move NE on a turn when it has already moved NW, or vice versa. If this happens, roll again (unless no other movement is possible).

(b) The Ogre will not move into a crater or off the map-edge. If a die roll indicates that this happens, roll again.

(c) The Ogre will cease random movement when it comes within 3 hexes of the north edge of the map, or 5 hexes of the CP. At that time it will move directly for the CP. It will not turn aside to ram units, but will ram them if they are in the way.

(d) Until it fulfills condition (c), the Ogre will ram enemy units whenever it can do so without turning around. It will sometimes turn around to ram a unit. See below.

### OVERRUNS

The Ogre will not change its course to overrun enemy infantry. However, it will overrun them if they are in the hex that it enters.



## RAMMING

If one of the three hexes in front of the Ogre (that is, N, NE or NW) contains an enemy unit, the Ogre will always enter that hex to ram/overrun. If there are more than one enemy units in front of the Ogre, the Ogre will choose one to ram, using the same priorities as for firing (below).

If there are units directly behind the Ogre, but no units directly in front, the Ogre may turn to ram one of those behind. It will not do this unless there is an enemy unit adjacent to it. To see whether it does so, roll one die. On a result of 6, it reverses one hex to ram an enemy behind (determine which one as described above). On any other result, it ignores the enemies behind it and moves normally.

If the Ogre rams an armor unit and merely disables it, roll one die. On a 5 or 6, it will stay in that hex, expending one movement point, to ram it again and destroy it. Otherwise, it moves on.

If the Ogre is down to 5 tread units or less, it will still overrun the CP or infantry if it can, but it will not ram any armor units other than howitzers unless it must do so in order to reach the CP.

## COMBAT

After it finishes movement, the Ogre will fire its weapons in the following order:

- (1) AP.
- (2) Secondary batteries.
- (3) Main batteries.
- (4) Missiles.

If there are enough AP units to get more than a 1-1 attack on each adjacent infantry unit, the Ogre will divide its fire as evenly as possible between them, without “wasting” points. Example: It would never make more than a 3-1 AP attack on a single infantry unit, because a 3-1 attack insures its destruction.

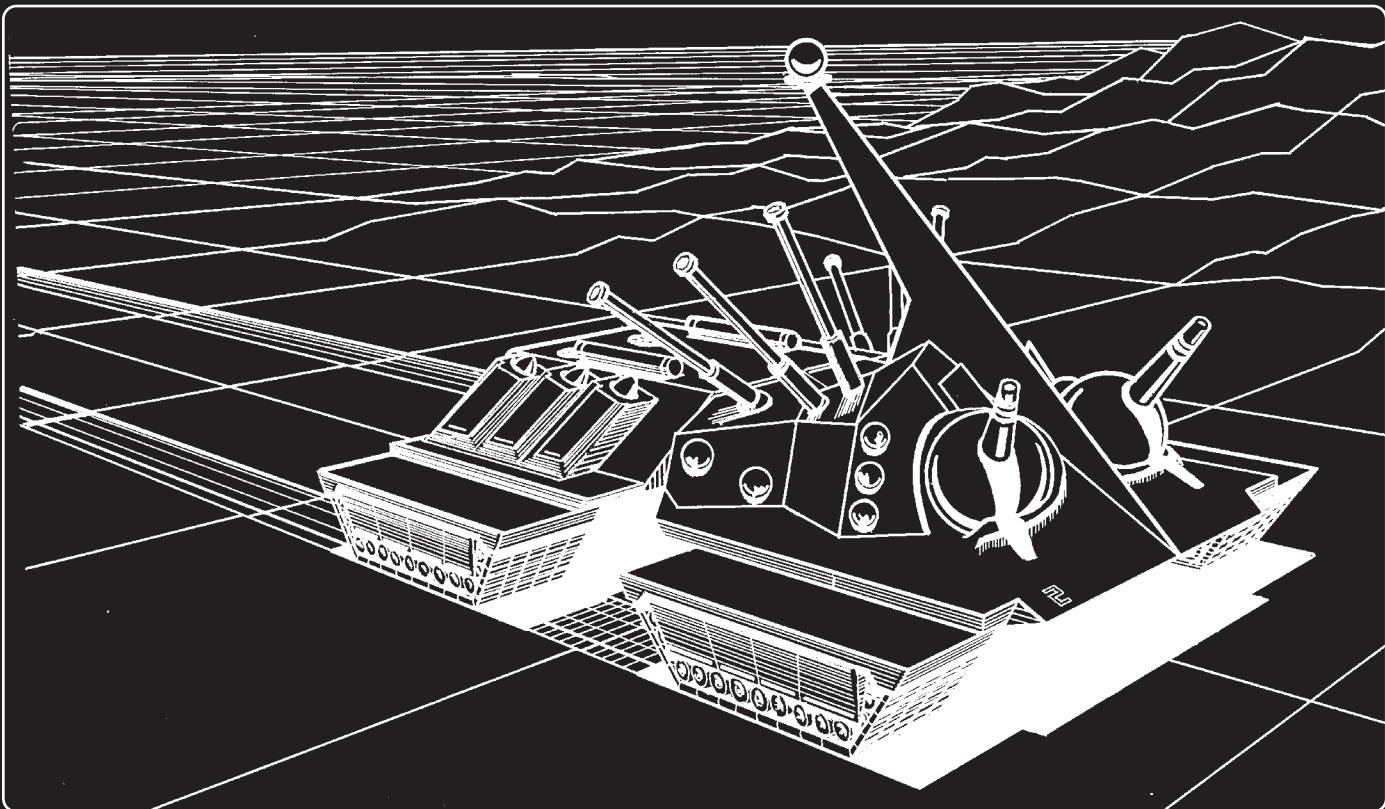
If there are not enough AP units to get 1-1 attacks on all adjacent infantry, the Ogre will make as many 1-1 attacks as it can, and put the rest into a single 1-2, if possible.

The secondary batteries fire after AP. Target priorities are: (1) the CP; (2) howitzers; (3) other armor units; (4) infantry. Given the choice, the Ogre will fire on a disabled unit rather than a non-disabled unit of the same priority. When the Ogre must choose between two units of the same priority, it picks one randomly (roll a die).

Main batteries fire after secondary batteries. They have the same targeting priorities. Note that each main and secondary gun fires individually. The Ogre never combines fire from any of its weapons except the AP units.

Missiles fire last. The Ogre will always fire a missile at a CP or howitzer within range. If there is no CP or howitzer within range, roll one die. On a 1 or 2 the Ogre will fire one missile. It picks its targets as above, except that GEVs have a higher priority than tank units, and missiles are never wasted on infantry.

Leaving the board. If the Ogre succeeds in destroying the CP, it will try to leave the map. Substitute SE, S, and SW for NE, N, and NW in the movement rules, and continue play. When the Ogre gets within 10 hexes of the S map edge it will head directly for that edge, ignoring opportunities to ram. If it makes it, the robot has beaten you!



**A**nother viewpoint. But one of the things that's kept this game around so long is that there are a lot of different ways to run a defense (or an attack). Which leads to

interesting arguments. Which leads to sitting down and playing another game or three . . .

# BASIC OGRE DEFENSE

By Michael Nahes

The attacking side in *Ogre* is fairly easy to learn. Not so the defense. At first, it seems as though the defenders have an impossible task; the Ogre is so heavily gunned and invulnerable that it's hard to do more than scratch it . . . while it eats your units. With practice, though, a defender can learn to make those "scratches" add up to a dead Ogre. This article, therefore, is a guide to defensive play for the beginning *Ogre* player. An earlier article (see p. 48) covered the "four howitzer defense." This is the opposite: the "no howitzer defense."

## SELECTION OF UNITS

I cannot think of a more useless unit in *Ogre* than the Howitzer. Instead, I'll take two Heavy Tanks. The tanks have a combined attack factor of 8 as compared to the Howitzer's factor of 6, eight times the defense ability, and profile two separate targets for the same cost as the Howitzer.

GEVs have the advantage of great speed, at relatively small expense. Their weak point is their armor; with a defense of only 2, they're as good as gone if hit. Played right, the GEV attacks the Ogre and uses its speed to move out of attack range. However, a force with more than 50% to 60% GEVs is too lightly armed. It won't have enough attack strength to do the job.

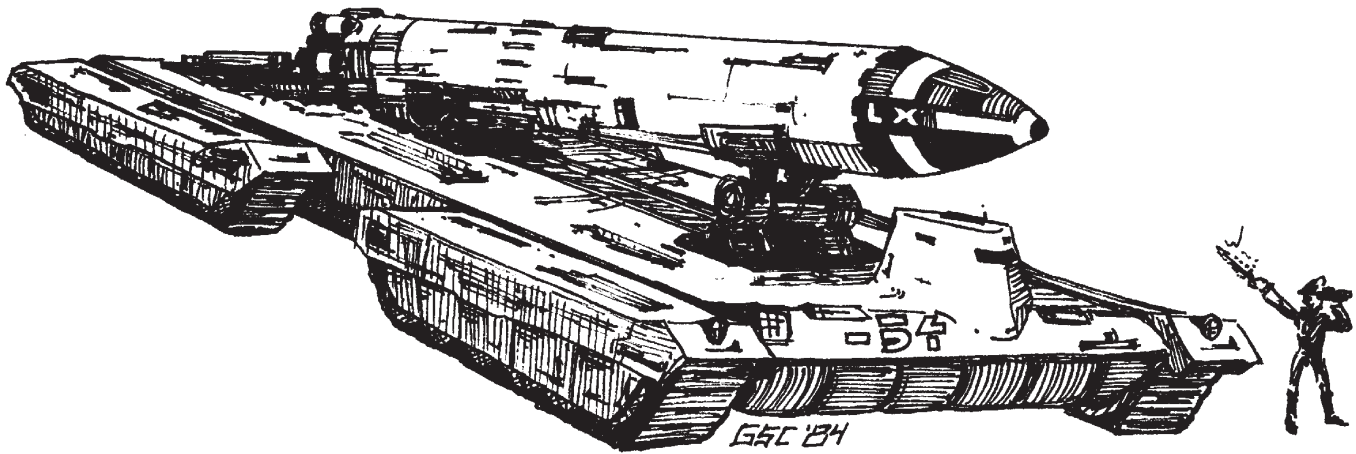
The Heavy Tank and the Missile Tank are of approximately the same value. The Heavy Tank has the edge in speed, defense, and firepower. The Heavy Tank's weakness is its range; it must move in so close to attack that its destruction is almost certain. The Missile Tank, on the other hand, can stay at a relatively safe distance and take pot shots at the Ogre, but its speed will not let it keep up with a healthy Ogre.

I usually take 10 GEVs, 6 Heavy Tanks, and 4 Missile Tanks in the advanced game. In the basic game, I'll take 6 GEVs, 3 Heavy Tanks, and 3 Missile Tanks. This seems to be a good force mix, with the GEVs for speed, and the tanks for firepower.

## SETUP

The GEVs should be positioned as far toward the Ogre's entry area as possible without being hemmed in by rubble. Spread them out so that some of them can reach the Ogre on its first turn, no matter where your opponent starts. Second in priority is the Missile Tank. Position the Missile Tanks near the middle of the map and off to the east and west edges. That leaves the Infantry and some Heavy Tanks behind the "crater line." The Infantry won't be needed until later, and the Heavy Tanks, with their speed, will be able to catch up to engage the Ogre. As for the Command Post, put it on the far north edge in the center, so we can encourage the Ogre to come up the middle.





*Concept drawing for the Paneuropean missile crawler, by Graham Chaffee.*

## BATTLE

**Ogre** can be divided into three distinct tasks: hit and run, engage, and hold at all costs. The first portion of the game is where the GEVs make their hit and runs. The GEVs should target the main batteries, if you can gather enough firepower for good odds. Otherwise, fire at the secondary batteries, and any GEVs in firing range not taking part in that attack can fire on the treads.

(So why not fire on the missiles? Because they are used up when fired, which is just as good as being destroyed. Look at it this way: You move your tank in close enough to shoot at a missile, but the Ogre shoots up your tank with its batteries. That's one missile for one tank. What is the difference if the Ogre shoots at your tank with one of its missiles? The exchange is still one missile for one tank, and the tank might even survive.)

After the GEVs have made their attack, it's time for them to run . . . I call it GEV flee time. Scatter your GEVs in all directions, but keep them within range of the next anticipated location of the Ogre.

When the Ogre approaches the middle of the map, it's time for some good fighting. If you can't move your units in close enough for a first strike, make sure they are far enough away so the Ogre won't get the first strike. The first attack should still be an attempt to pull the Ogre's teeth. When the Ogre has reached the middle of the map

you must start attacking the treads; this is to slow the Ogre down so your infantry and Missile Tanks can keep up with it. You have been moving your infantry up all this time, haven't you? The whole idea is to surround and attack with as many units as possible. Surrounding the Ogre is easier if the Ogre is coming up the middle of the map instead of running up one of the sides. If the Ogre player has been smart enough to save his missiles, then you will have to knock those out before the Ogre gets any closer to the CP.

Now you have a wounded Ogre limping along toward your CP. Your infantry units are charging the Ogre and are being cut down by the cyber-tank's antipersonnel weapons. The Ogre must be stopped; all attacks must be concentrated on the treads. You cannot afford to attack antipersonnel weapons, and the mains and most of the secondary batteries should have been knocked out by now.

I hope this will give you a good start in learning to play the defense. Maybe you could talk your opponent into some optional rules to give you a handicap. Try using this one: if a unit attacking treads is half or less its maximum range away from the Ogre, then boost the odds up to 2:1. This can give a beginning player quite a bit of help when that Ogre comes rolling down the pike.





I'm not sure I have *ever* won a game of *G.E.V.* against Phil Rennert, and that should be absolutely all the introduction this article needs.



# TOURNAMENT *OGRE/G.E.V.*

## By Philip Rennert

The escape of *Ogre* and *G.E.V.* from the quagmire of litigation has gladdened the hearts of all of us long-time *Ogre/G.E.V.* fans. On this occasion, I would like to pass on some hints for better play acquired through experience in various tournaments. I hope you find them useful.

Nearly every *Ogre/G.E.V.* tournament I've played in has used the "Ceasefire Collapse" scenario, since it is clearly balanced. (I think this is a pity, since my favorite scenario is "Raid"; it's a lot of fun to knock down bridges, tear up tracks, murder civilians, and generally devastate everything in sight. Might I suggest to some tournament director out there a "Raid" tournament, balanced by having the players bid victory points for the privilege of playing their chosen side?) Everything I say here should be taken to refer to "Ceasefire Collapse," unless another scenario is indicated.

First, I'd like to mention two general principles which should govern strategy.

1. The business of war is the destruction of enemy troops.

In other words, forget about those CPs with the high point values and those civilians you're sworn to defend and go after enemy units. You can pick up his CPs and towns later as a prize of victory – if you've first destroyed his forces. In fact, you might even leave your CPs very lightly protected in order to tempt him to detach a force to attack them; this leaves you free to fall on his remaining units with your whole force. Also, don't waste shots on CPs and towns when there are enemy units within range.

2. Strive to concentrate your whole force against a portion of the enemy's.

This has been a maxim of military strategy for thousands of years, and it should be the basis of your maneuvering. Along these lines, there's a trick which can gain you a significant advantage before the first shot is fired. Ask to set up secretly and simultaneously, then start your whole force in a clump as far forward as possible along the east-west road (i.e., from 1412 to 0513 on the old edition map, from 1408 to 0404 on the new). If you're lucky, your

opponent will spread his units out along his whole side of the board. You can then make a fast attack along the road (try to get the first move, if possible), and his units starting at the other end of the board will be out of the action. This may be enough of an edge to win the game. A skilled opponent may be able to withdraw his attacked wing with little loss and concentrate on his center; if he does this, your surprise attack has failed, but you still have an even battle.

These principles may be well and good, you say, but they don't help in a tactical situation. Therefore, I'd like to discuss tactics for each kind of unit. To get a rough measure of their relative values of various kinds of units, I've drawn up the following chart. This chart gives the victory probabilities for a one-on-one duel between the indicated units in open terrain. It takes D results into account, and assumes an exchange of shots until one unit is destroyed. The numbers given are the percent chance of victory, with the favored unit indicated (e.g., if a HVY fires first in a duel with a GEV, the odds are 94% to 6% in favor of the HVY). If the units have the same attack and defense strength, the advantage lies with the first to fire, as noted on the chart.

Various things can be seen from this chart. Most evident is the advantage that comes from getting off the first shot. In general, do not rush an equal force unless most of your force is close enough to be able to get off the first shot after movement. This is the main objective of the tactical maneuvering that goes on after the two sides meet in the middle of the board.

Another interesting point is the lack of pecking order among the armor units. If a MSL fires first at a HVY (and it usually will, since the attack range – movement plus range – of a MSL is 6, and that of a HVY is 5), the MSL will win 62% of the time. If a HVY duels a GEV, even if the GEV fires first, the HVY will win 73% of the time. A GEV-MSL duel is even, with advantage to whoever fires first. Therefore, there is no unit which dominates the others; this is a mark of good game design.

## FIRING FIRST

|         | GEV, LT     | MSL         |
|---------|-------------|-------------|
| GEV, LT | 69-31 first | 69-31 GEV   |
| MSL     | 69-31 MSL   | 69-31 first |
| HVY     | 94-6 HVY    | 86-14 HVY   |
| MHWZ    | 100-0 MHWZ  | 100-0 MHWZ  |
| HWZ     | 100-0 HWZ   | 100-0 HWZ   |

## FIRING SECOND

|      | HVY         | MHWZ        | HWZ         |
|------|-------------|-------------|-------------|
| HVY  | 73-27 HVY   | 56-44 GEV   | 83-17 GEV   |
| MHWZ | 69-31 first | 56-44 MSL   | 100-0 MSL   |
| HWZ  | 69-31 first | 82-18 HVY   | 100-0 HVY   |
|      | 82-18 MHWZ  | 100-0 first | 100-0 MHWZ  |
|      | 78-22 HWZ   | 100-0 HWZ   | 100-0 first |

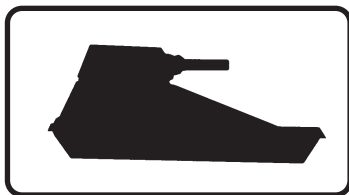
Now I'd like to consider the units one at a time, describing their good and bad points, making some unit choice recommendations, and giving some tactical suggestions about how to use, and oppose, them.

## HEAVY TANK

*Good points:* attack, defense strength, mobility.

*Bad points:* range.

*Recommendations:* Choose lots of them. A HVY's 4 attack factor gives you the best possible bang for the buck, and its high defense strength and ability to ignore woods and streams while moving 3 are also strong recommendations. I believe the best force is one made up mostly of HVYs.



*What to do with yours:* Put them in the forefront of your armor line (but behind your Ogre). If you have many HVYs, try to fight the decisive

battle in the northern, forested part of the board, where their mobility is greater than other units'. Let them lead the armor attack.

*What to do about the other guy's:* There's not too much you can do, other than concentrate superior numbers and firepower (like an Ogre). Try to pick them off from outside their range, with an infantry-screened MSL or HWZ. The only problem is that you might not be able to stay outside their range for long.

## GEV

*Good points:* speed, double move.

*Bad points:* attack, defense, range, sensitivity to terrain.

*Recommendations:* GEVs are great raiders, but they're not suited for the kind of stand-up fights that occur in "Ceasefire Collapse." Don't choose many GEVs.

*What to do with yours:* GEVs should stay around the edge of things, darting in to put in their two factors' worth and then running. A GEV raider coming up and retreating along the east-west road



is another possibility. GEVs are the best units for mixing in on the duel of Ogres that usually precedes the armor battle, and living to tell about it. If you do take a lot of GEVs, try to keep them together. (In the "Raid" scenario, the offense should take mostly GEVs. I like to think of GEVs as killer bees: They're best in swarms.) A swarm of GEVs is good for rear area raids on MSLs and HWZs (as I said above, don't go after CPs).

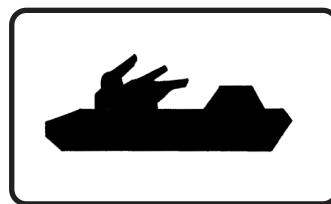
*What to do about the other guy's:* Fighting the battle in the northern woods is a big help. Otherwise, HVYs are good medicine for GEVs – they can afford to give away the first shot and still usually win. Infantry is good for delaying GEVs, especially in a town or forest. I mentioned above the possibility of exposing CPs to distract enemy GEVs.

## MISSILE TANK

*Good points:* range, attack strength.

*Bad points:* speed, defense strength, sensitivity to terrain.

*Recommendations:* MSLs are good things to have backing up your HVYs in a battle, but their low speed and sensitivity to terrain make it difficult to get them there in time. Choose one or two, maybe, intending to keep them on the road to off-



set their speed disadvantage.

*What to do with yours:* They should be your second line. Try to keep them four hexes away from their targets, with a line of HVYs or infantry in between. The basic job of a MSL is to shoot at enemy units from outside their range, since MSLs don't last long when shot at. They're also good for finishing off a wounded Ogre, if the Ogre is hurt too badly to catch them. (In a game of *Ogre*, my favorite defense is about half and half HVYs and MSLs.)

*What to do about the other guy's:* Try to get close enough to kill them, basically. If he has a line of MSLs behind his main line, a well-placed overrun may knock a hole through which your units can get within killing range of the MSLs. Since they're slow, you may be able to maneuver the fighting away from them, or to where they have to come closer to get shots off.

## LIGHT TANK

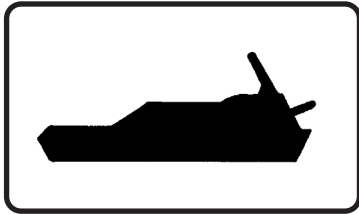
*Good points:* cost, speed.

*Bad points:* defense strength, range, sensitivity to terrain.

*Recommendations:* LTs share with HVYs the distinction of having the best attack strength for their cost, and a pair of LTs takes two hits to kill, as opposed to one for a single HVY. Choose a pair or two.

*What to do with yours:* Keep them on the edges of the battle. You don't want them in the center, since you want more firepower than 2 factors/hex, and stacking in the center can be bad news, but you want them in there shooting. They're your flankers. They can be used for rear end defense against GEVs, but make sure they outnumber the GEVs in this case; a well-handled swarm of GEVs can outmaneuver and destroy an equal number of LTs.

*What to do about the other guy's:* The same as for HVYs. Try to hit them from outside their range. They're easier to kill than HVYs; it's just that there are more of them. A swarm of GEVs can whittle them away, but it takes awhile.



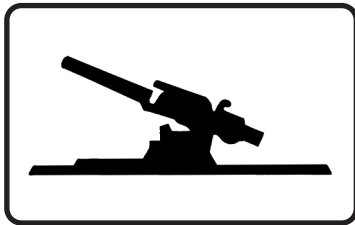
## HOWITZER

*Good points:* attack strength, range.

*Bad points:* cost, immobility, defense strength.

*Recommendations:* The trouble with any fixed defense is that all the enemy has to do is walk around it.

Tying yourself to HWZs limits your flexibility too much; I don't recommend choosing any.



*What to do with yours:* Pick a good place to put them, then keep them well screened with infantry.

Moreover, keep your mobile forces close by; there's no point in choosing a HWZ and then going out to fight the big battle outside its umbrella. If one of your HWZs is being attacked, put your infantry in the hexes the attackers would like to shoot from (e.g., two hexes away, for a GEV attack), forcing them to overrun or delay while they mop up the infantry.

*What to do about the other guy's:* Just walk around them; stay outside their range when possible. When you do attack, there is no better target for an Ogre missile than a HWZ. Go get 'em. In *Ogre*, a good four-howitzer defense has been published (p. 48) for the basic game (Ogre Mk III with two missiles), but this idea does not work for the advanced game (Ogre Mk V with six missiles); the defense can't shoot away the Ogre's missiles

quickly enough to avoid getting its HWZ missiled. A concerted rush by GEVs or other units will also destroy a HWZ. Remember this: Never rush a HWZ half-heartedly. Expect to take some losses on the way in, then get a unit into killing range of the HWZ as quickly as possible and it's all over.

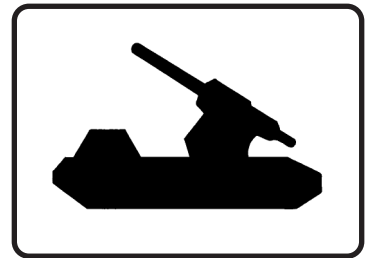
## MOBILE HOWITZER

*Good points:* attack strength, range.

*Bad points:* cost, speed, defense.

*Recommendations:* A MHWZ has the same attack strength as a HWZ, enough range to fire unreturnable shots fairly often, and the mobility to go (slowly) where you want it, plus an extra point of defense strength. Choose at least one, maybe two.

*What to do with yours:* Keep them far enough back to shoot without getting shot at, and screen them with infantry as you would a HWZ. Keep them on the road to increase their speed; a road junction like 1412



or 0513 in the old edition or 1408 and 0404 in the new, is a good place for them, since it gives you an attack range of 8 in many directions. Unfortunately, they make good targets for Ogre missiles, so you must keep them well back (and maybe in a town) while there are missile-firing enemy Ogres active. They are good for resolving stalemates in your favor; if two lines of HVYs are facing off six hexes apart, a MHWZ in your line means he must either rush or withdraw. And if you prefer a mostly-HVY force, as I do, they provide insurance that your opponent won't try to hole up on the island, blow the bridge, and laugh at you.

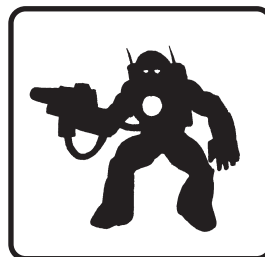
*What to do about the other guy's:* Ogre missiles are a good way to get rid of them. Otherwise, you can rush them; they're easier to get close to without getting hit than HWZs. They are very slow; it may be possible to maneuver the battle away from them.

## INFANTRY

*Good points:* cost (often free), overrun strength, terrain defense benefits.

*Bad points:* range, speed.

*Recommendations:* You get them for free in many scenarios, and they have a number of uses. Basically, they're expendable cannon fodder, but they shouldn't be wasted. Losing your infantry probably won't lose you the battle, but using them well could win it.





*What to do with yours:* Towns, forests, and swamps are good places for infantry. As mentioned above, there should be an infantry screen around each HWZ or MHWZ. There should also be some infantry guarding your towns and CPs (if they won't stop GEV raiders, they'll at least delay them, which is what you want). Most of them, however, should be at the battle, trying to get close enough to overrun something. Many players, thinking in World War II terms, don't realize how deadly a powered infantry overrun can be, but their double strength plus the fact that they're multiple targets makes them odds-on to kill anything but an Ogre in an overrun. Keep an eye out for an enemy unit ending his move within two hexes of your infantry; if you see one, get him. Infantry overruns, and the threat of them, can be the deciding factor breaking a deadlock in the battle. It is often a good idea to have a line of infantry in front of your first line of armor – they can advance, threatening overruns, and force the enemy to either withdraw or attack the infantry and open himself to a counterattack by your armor.

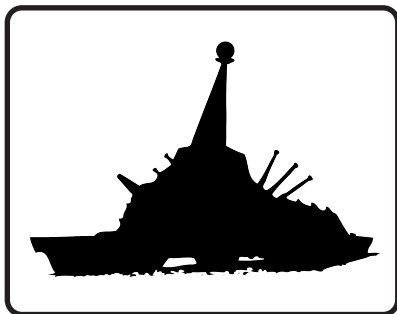
*What to do about the other guy's:* Infantry are easy to shoot from outside their range; a HWZ, MHWZ, MSL, or GEV can do this. Alternatively, you can bring an Ogre adjacent and let its AP guns munch them. Do not overrun infantry if you can help it, and watch out for their overruns. Unsupported infantry can be whittled away without loss by long-range fire or GEV raiders, but it takes time, which you may not have. To counter an advancing infantry line, put out an infantry line of your own and let the infantry overrun each other, which usually results in an even exchange.

## OGRE

Saving the best for last, we come to what the game's all about.

**Ogre/G.E.V.** tourna-

ments usually consist of battles between one Ogre and some number of armor units on each side, but there are sometimes two Ogres. I will assume that the power plant explosion rule is not being used. (I agree with this, since the rule with equal Ogres on each side usually just leads to a big bang and a game of **G.E.V.** without Ogres. However, I'd like to mention an interesting tactical situation that came up with the power plant rule in effect at Origins '80. One side had a Mk III and eight armor units, and the other a Mk IV and four. The Mk III could win by kamikaze-ing the Mk IV and fighting eight against four if it could reach the Mk IV's hex, but the superior speed of the Mk IV prevented this. A duel ensued, with the Mk IV standing off and firing missiles and the Mk III closing in and firing guns; it ended, as the odds would indicate, with the Mk IV's missile racks gone and the Mk III having one or two



guns left. The Mk III was now free to chase enemy armor and CPs, but only at the risk of having the Mk IV run around behind it and go after its armor and CPs. A tricky situation; I won't tell you how it came out, but I recommend playing it, as per the "Ceasefire Collapse" rules, as a tactical challenge. I'd be interested to hear who you think has the advantage.

*Good points:* everything.

*Bad points:* I don't know. Cost, I guess.

*Recommendations:* As the rulebook says, the "Ceasefire Collapse" exchange rates for Ogres (8 armor units for a Mk III, 12 for a Mk IV or V) undervalue them. Choose the biggest Ogre you can; choose two, if they'll let you, even if it means having no armor. In my opinion, the Mk V is much superior to the Mk IV, and you should always choose a Mk V; this difference may be enough to win the game. The reason is that the Mk IV is too vulnerable to having its missile racks shot off, and then it doesn't have much offensive power left.

*What to do with yours:* Put it in front; let it lead the attack. If you have two, stack them – they're immune to spillover fire, and it's a great concentration of firepower. It's usually a good idea to concentrate your fire on the enemy Ogre, since that represents his greatest concentration of firepower, but against this is the fact that D results only affect armor. Shooting at armor can be more effective if you're in a position to take advantage of Ds. It might be worth saving your missiles if he has a HWZ or MHWZ; otherwise, volley them as soon as possible. If you can gain a 2-1 gun superiority on the enemy Ogre, overrun it. The overrun rules are hard on Ogres, which lose their guns in an overrun; you'll be surprised at how fast they turn to junk. Try to avoid overrunning other enemy units unless you have a reason; it's generally too expensive, except maybe when overrunning single GEVs and LTs. Putting your Ogre in a town makes it really resistant to damage. Your opponent will probably fall back to draw it out.

*What to do about the other guy's:* It's not easy to stop an Ogre. Shoot at it with everything you can get, concentrating on guns first (missile racks, for a Mk IV). If you cripple it, finish it off quickly. Even without guns, it can still crunch your units undertread. The hard part, though, is getting that far. Your troops have good reason to wish they were somewhere else . . .

To summarize the strategy presented here, I envision a force starting in a clump near 1412 or 0513 (old edition; 1408 or 0404 new). It would then advance along the east-west road with an Ogre Mk V in the lead, followed closely by a line of HVYs (if speed is of the essence) or a line of infantry followed by a line of HVYs (if it isn't). This line would be backed up at the appropriate distance by a MHWZ and maybe some MSLs. On the flanks of the line, in the less wooded areas, would be LTs and possibly GEVs. Tactics, of course, will depend on what and where the opposing force is, the basic idea is to get the enemy Ogre first, and then the armor. The outcome of the battle will probably depend on the close-in maneuvers for position, and who succeeds in getting off the first shots with

This is a great convention game, even for people who aren't familiar with *Ogre*. It's not as though the rules were that hard to learn, and the chance to squash a few

vehicles is a *great* inducement. The clay vehicles sometimes look like cartoon "Ogre Babies"—terrible idea . . . Try it sometime. But not on the carpet.

the majority of his force.

# OGRE SQUASH

By Rusty Lamont

*Ogre Squash* is not a game where people wander about squashing creatures for fun, but a game of miniatures with a novel twist. Conceived and designed by John Aro and myself, *Ogre Squash* is an enjoyable variant of *Ogre*. For those who are ardent, die-hard *Ogre* players, Squash is a healthy diversion. For those who are not boardgamers, or are not familiar with *Ogre*, *Ogre Squash* has simple rules which can be learned by a beginner in a few minutes.

*Ogre Squash* is played on any medium-sized floor with tape measures and clay miniatures constructed by the players. Here's what you'll need:

1. Modeling clay – about 9 lbs. for a 20-person scenario, less for others. Good modeling clay that can be used over and over is available in most art stores. Don't use Play-Doh. For permanent vehicles, use self-drying or a kiln.

2. Tape measures and masking tape.

3. A scenario such as one of the two detailed here or the ones found in *Ogre* and *G.E.V.*

## PUTTING TOGETHER SCENARIOS

I currently run two scenarios as an introduction to *Ogre Squash*. The first has 20 players (10 per side) battling it out on terrain similar to a Mississippi River bottom with a bluff on one side, a deep river running down the center (criss-crossed by a road with two bridges), a lake, and a wooded area (see Diagram 1). Any terrain is useful and adds a dimension of strategy not usually found in *Ogre*. I usually lay out the terrain using masking tape of varying sizes, colors, and widths to outline the areas, and put a big letter within the area showing what it is (i.e., "W" for woods, "B" for bluff, etc.). No matter how carefully one draws the scenario board on paper, it can't be duplicated exactly with masking tape, so don't be shy about making triangular lakes (consider the triangle to be the part of a rounded lake where an Ogre can be totally

submerged), or a noncircular Devil's Tower (see Diagram 2), etc.

## MODELING FIGURES

At the major conventions where I have run *Ogre Squash*, there has been a prize awarded for the Best Designer (or should that be sculptor?). This adds a little more fun to the actual modeling process. Of course, every player is expected to create his own vehicles (I usually supply the GEVs from a cache of hardened ones I bring along), trying to keep them fairly proportionate: Ogres should be no more than 4" long, GEVs and other vehicles should range between 1" and 1.5". However, this scaling is not absolutely necessary for the play of the game, as all measurements are taken from the nearest edge to the target. Put all figures on small sheets of paper (on which one can write out the statistics) to save carpets from almost certain discoloration.

## MARKING THE FIGURES

Because the clay most used is gray, the vehicles are intrinsically indistinguishable from one another. A good way to mark them is to stick flags into the backs with garbage-tie posts, coathanger pieces (which also make excellent guns) or toothpicks. Flags are made by putting peel-off mailing labels on the posts or by folding strips of masking tape onto them. On these flags can be written the name of the Ogre, its identification number, or whatever the players desire. Smaller pieces (like the BIMPs described later) can be carved with the owner's initials or permanently painted.

## PLAYING

Now that the terrain has been laid out and the floor is covered with clay figures, play begins much the same as in *Ogre*, but with the following differences:



Machines may fire out of the woods only at targets above (i.e., on bluffs, flying targets, etc.).

## NEW MACHINES

Here are two new units for use in the scenarios described below.

### GRABBER

These are workhorse machines capable of picking up any objects up to 5' in diameter. Measuring 10' x 10' (the actual vehicle, not the model), a Grabber climbs aboard any friendly vehicle for transport. Grabbers ride outside of most units, or inside an Ogre, and are destroyed when that machine is destroyed. They have no attack capabilities, and virtually no defense. A Grabber has a movement of 3. Terrain affects it as though it were a Missile Tank.

Any shot of higher strength than AP will destroy a Grabber not affixed to another vehicle; otherwise, it can only be destroyed when the transporting machine is also destroyed.

### BIMP

BIMP stands for Battle Immobilizing Mine Pack. BIMPs are mobile, treaded mines that explode beneath any target they are set after. Originally designed to draw an Ogre's attacks while trying to destroy it, they're quite effective if they make it underneath any treaded unit. A BIMP moves 3; terrain affects it as though it were a Missile Tank. Its defense is 2.

If a BIMP does make it to an Ogre's hex, it will explode, doing 3d6 tread damage. Any armor unit or CP will immediately be destroyed if the BIMP is able to explode beneath it. BIMPs cannot affect infantry unless the infantry is trying to overrun them (see below).

If you are playing *Ogre* rules (using "ramming") then a BIMP picks one target and explodes as soon as it enters an enemy hex – the enemy has no chance to destroy it once it enters the hex. If enemy units move into a BIMP

1. Change all movement and firing ranges from 1 hex to 1 foot.

2. Firing and movement must be committed to a specific target or in a specific direction before measurement takes place, and the shot or move takes place thereafter, even if it's short.

3. Any time a section of an Ogre is hit, that section (or its probable location) may be demolished, using the fingers only. Any totally destroyed vehicle may be immediately "squashed" by any creative means possible.

4. All measurements regarding distance or firing are taken from the closest edge of the vehicle to the intended target.

5. Only Ogres may move into water, losing 1' movement immediately upon doing so, and 1' per turn thereafter for every turn of submerged movement. GEVs skim the surface at +1' movement/phase.

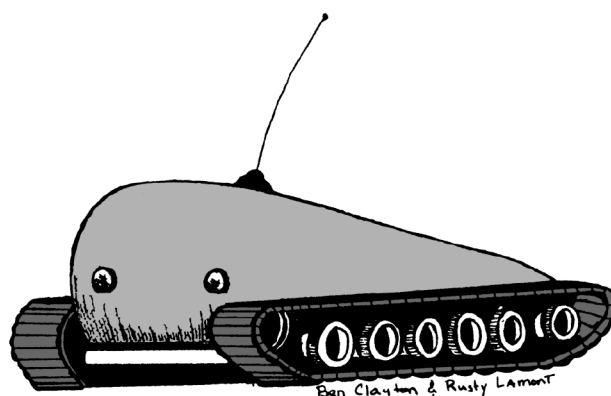
6. Any vehicle may shoot from a bluff so long as it is adjacent to the edge. Doing so allows an additional +1' range.

7. Any vehicle may shoot upwards along a bluff as long as the target is on the edge. This shot is a -1 to hit.

8. Movement onto or off a bluff may only be done through a pass. A vehicle either on or off a bluff may shoot at a target in a pass with no penalties or bonuses.

9. Underwater combat can only be accomplished with ramming and missile fire. Missiles are at full strength, but ramming attacks are at -1 die effectiveness. No machine may fire into or out of the water to hit another.

10. Woods obscure all vision and firing unless the target is 1/2' away or closer. Ram attacks are at full strength.



*Pictured here is a Battle Immobilizing Mine Pack, or BIMP. Above, the waldo on treads is a Grabber unit.*



hex, roll one die. On a 1, 2, or 3, the BIMP may pick a target and attack it – this happens immediately. On a 4, 5, or 6, the BIMP is destroyed.

If you are playing *G.E.V.* rules (using “overruns”) then a BIMP may pick a target and explode during any of its own attack turns in an overrun. Therefore, if the BIMP is part of the overrunning force, the enemy will get a chance to destroy it before it can explode. If the BIMP is part of the force being overrun, it will be able to explode before any of the overrunning units can attack it.

Normally, infantrymen can avoid a BIMP. If, for some reason, a BIMP is overrun by infantry, it can explode and get them before they can get it. It automatically gets one squad of the attacking infantry.

## BATTLE TO THE DEATH

Two teams of 10 players each, equal in composition, battle it out on variable terrain.

*Victory Conditions:* Play until only one force survives.

*Force Composition:*

*Player 1:* 2 Mark IIIs

*Player 2:* 1 Mark V, 2 Mobile Howitzers

*Player 3:* 4 Mark Is, 1 Mobile Howitzer, 1 Mark III

*Player 4:* 10 GEVs, 1 Mark III, 1 Mobile Howitzer

*Player 5:* 1 Mark V, 2 Missile Tanks

*Player 6:* 1 Mark V, 2 Heavy Tanks

*Player 7:* 2 Mark IIs, 1 Mark III, 6 GEVs

*Player 8:* 6 Mark IIIs

*Player 9:* 1 Mark III-B, 2 Mark Is

*Player 10:* 1 Paneuropean Fencer, 1 Mark II, 1 Mark I

*Playing Field:* Map 1

*Turn Sequencing:* By team, all at once.

*Playing Time:* 4-6 hours.

## FUEL WARS

Desperate times require desperate measures. When Ogres run low on fuel, combat readiness and even simple functioning becomes endangered. Not that fuel is scarce – there’s plenty of extracted uranium stored – but it’s unprocessed, and Ogres don’t have the processing capabilities. Back before the wars began, all processing was done by nuclear engineers – the methods were never programmed into the massive machines for fear that self-sufficient machines would soon become threats to the creators. At present, duels occur over packets of processed fuel and not over the petty, unsolvable squabbles of mankind. Not many machines are still operational, because only the strong survive – by cannibalizing destroyed opponents.

In the western sector of North America, there stands a rock formation called Devil’s Tower. Inside the imposing monolith are many tunnels and chambers blasted out by Ogres for use as a base and as a storage receptacle for their 16 nuclear packets.

In the east there are two main Ogre bases. They have formed a coalition dedicated to retrieving the nuclear packets from Devil’s Tower for their own use. They have different motives. One needs the fuel desperately for continued existence and will risk all to obtain as many packets as possible. The other has a generous supply and wishes to deny the Devil’s Tower supply to their rivals. Neither group knows the other’s plans and both will begin the attack on the premise that all fuel packets are to be split evenly between them.

*Victory Conditions:* Every time a successful hit on any Ogre or other machine is made, one Victory Point is awarded to that player. Every nuclear packet removed from Devil’s Tower nets an offensive player 5 *Victory Points*. At the end of the game, when either the Offensive or Defensive team is eliminated, the player with the most Victory Points wins.

*Force Composition:* Variable, determined by constructing machines from a point value as follows:

Offense A (destroy packets): 35 points per player

Offense B (steal packets): 40 points per player

Defense: 55 points per player

These are Construction Points, not Victory Points.

*Construction Costs:*

| <i>Item</i>      | <i>Points</i> |
|------------------|---------------|
| GEV*             | 2.0           |
| Missile Tank*    | 1.5           |
| Heavy Tank*      | 1.5           |
| Howitzer*        | 5.0           |
| Mobile Howitzer* | 6.0           |
| Grabber          | 0.5           |
| BIMP             | 3.0           |

*Ogre Parts:*

|                    |     |
|--------------------|-----|
| Main Battery*      | 3.5 |
| Secondary Battery* | 2.5 |
| 10 Tread*          | 4.0 |
| Missile*           | 4.0 |
| Missile Rack*      | 6.0 |

\*as taken from *G.E.V.* and *Ogre*.

*Playing Field:* Map 2

*Turn Sequencing:* At the beginning of every turn a random drawing is held for sequence so as not to identify each player’s team.

*Limitations on Construction:* Each player is limited to 4 Ogre chassis, 12 GEVs, and 8 BIMPs at maximum. All other machines and Ogre accessories are unlimited within the allotted construction points.

*Playing Time:* 2-5 hours.

Play begins at Devil’s Tower with the following teams:

1. Defense – protect packets.
2. Offense A – destroy packets.
3. Offense B – retrieve packets.

There are three players per team. The two Offensive teams will be unknown and indistinguishable from each other unless a player slips up and exposes himself.

Ogres and other machines are to be made in true Ogre Squash tradition with clay; sides are secretly and randomly drawn. Machines are constructed using a point system so that each member of the same team will have personalized forces.

The Defensive team will determine the location of all 16 nuclear packets and is free to move them as long as it has Grabbers.

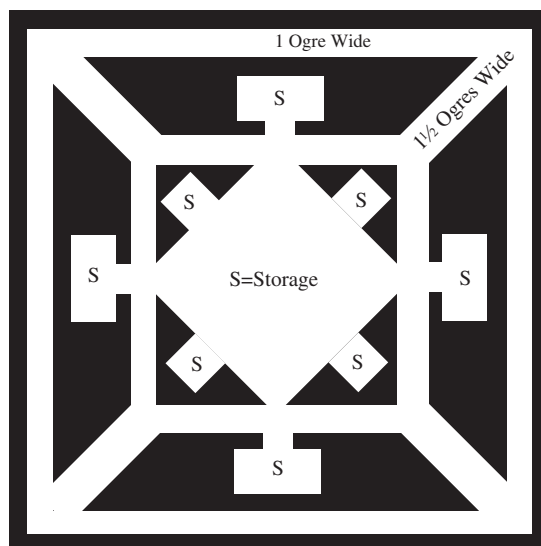
## Go For It!

Now that you know how it's done, try a game. Age groups range from 10 years old to adult . . .

Don't permit too many GEVs when playing. They reach their full potential in *Ogre Squash* and can be too effective.

For a change of pace in any game, try *G.E.V. Stomp*, *Panzer Bounce*, *Squad Squisher*, and so on. Be on the lookout for *Ogre Squash* at your friendly neighborhood gaming convention!

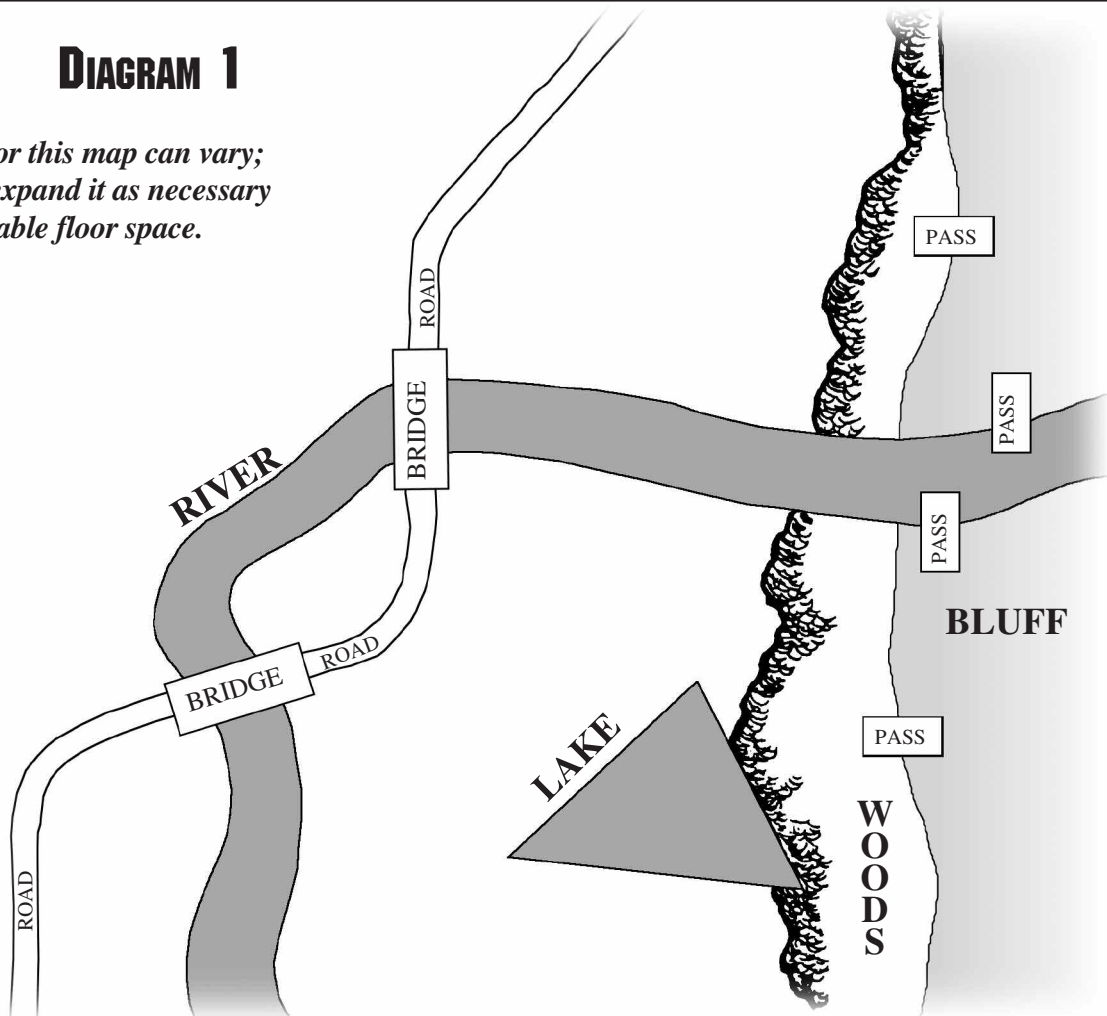
## DIAGRAM 2



*Scale is determined by the scale of the miniatures you've made; note that the hallways are either one Ogre-width or one and a half Ogre-widths across.*

## DIAGRAM 1

*Scale for this map can vary; reduce or expand it as necessary to fill available floor space.*



If you like this story, pat yourself on the back . . . you're good at spotting young talent. A decade after this story appeared in *Space Gamer*, Mike Stackpole was writing *Star Wars* novels that made the bestseller list. He tells me he has the outline for a whole *Ogre* trilogy, stashed away somewhere. If only! The honorable cybertank Azure and the baseball-loving knight errant who calls himself the "Lone Ranger" are the most sympathetic individual characters that *Ogre* has ever seen, and I'd love to read more of

their adventures. We liked the description of Azure so much that we created a whole new class of Ogre: the Ninja.

At the time Mike wrote it, this story was very non-canon. Now it fits quite well into the Factory States period. I'm not sure the USA would be so depopulated that Chicago and Phoenix would both have empty streets . . . but other than that, I have no quarrel with anything Mike has written here, and in his honor, the Empire of Vermont will certainly appear when the Factory States are mapped.

# THE LONE GEV

by Michael Stackpole

The Windy City was doing its best to live up to its name, and the night breeze coming off the lake was very cold. I could barely keep my teeth from chattering long enough to ask the computer, "Is 'Bluejays' one word or two?"

"One, Bluejays, B-L-U-E-J-A-Y-S, Bluejays," it replied, like a child in a spelling bee.

I knew instantly that that broadcast had been too long, so I forced my numbed hands to hurry and concentrated on completing my paint job. As I finished the "S," I heard, "Chi 18 to Chi control, we have an intruder," crackle through the radio implanted in my skull. I cursed and heaved the can of black paint at the tower, where it punctuated my graffiti with a splash.

I ran to my GEV with its Empire of Vermont insignias on the sides and the custom black paint job around the windscreens, and dropped through the

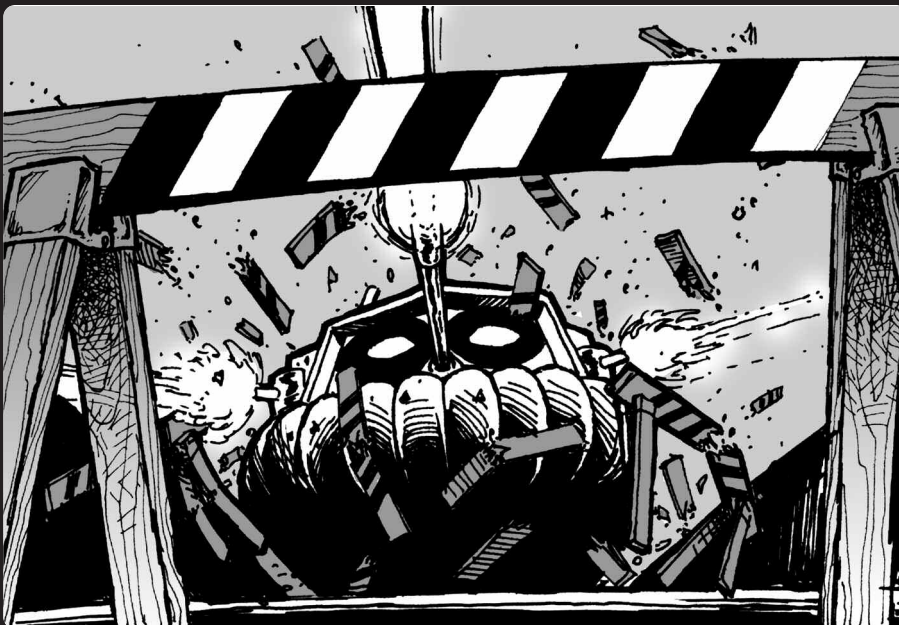
hatch into my command chair. Securing the hatch, I told the machine, "Start up, Silver, it's time we Hi-Hoed out of here."

Both fans purred to life. I watched the street sink away from me as I spun Silver and headed due south. I flipped the aux screen on; Silver filled it with a tactical map of Chicago. Red dots showed the positions of the Chi GEVs homing in on me. I poured on the speed and began to leave them behind.

Silver reported a roadblock ahead. The pursuing GEVs forced me to continue on my present course, so I radioed those brave souls attempting to stop a speeding GEV with sawhorses and two-by-fours: "Move it or lose it!"

Before the men at the barricade could answer, another voice spoke. "Chi 18 to Chi control, he wrote 'Go Toronto Bluejays' on the Sears Tower!" The boys at the barricade obviously heard him, because they opened up with small-arms fire.

I didn't even slow down. My gun roared and the roadblock was smashed into flaming splinters. Before the smoke had cleared I blew through it and into the night.





Someone survived my shot to murmur, "Who was that masked GEV?" over the radio. I smiled, patted Silver's console, and plotted a course for warmer climes.

\* \* \*

You've probably come to the conclusion that I'm mad as a hatter. If you haven't, let me fill you in on a few details that might convince you. If you don't believe someone who paints a mask on his GEV, names it Silver, and wanders into the heart of enemy territory to commit acts of wanton nonsense is utterly crackers – then *you're* nuts. Welcome to the club.

I had been trained as an Air Cushion jockey for the Empire of Vermont right after the federal collapse. I left the service when I killed my lieutenant. A fair trade, since he'd killed the rest of the crew.

Outside the few "civilized" enclaves I found, the law of the jungle had taken over. Silver was in pretty good shape and well-supplied, so I started hunting down raiders, shooting up self-styled overlords, and generally making trouble for the people who were making trouble for the underdogs. Besides, I had nothing better to do, and it was a way to pick up spare parts.

My only regret is that I've had no silver shell casings to leave behind. The occasional hail from a passing patrol, and hearing a radio broadcast mention my name, make up for it.

Anyway, if that doesn't make me, Thomas Kerin III, a.k.a. The Lone Ranger, madder than anyone has a right to be, I don't know what does.

\* \* \*

The terrain outside had gone, in three days, from green and leafy to brown and spiky. The remnants of signs on the broken highway suggested that Phoenix was ahead. I'd reach it by sundown. The temperature outside was 120°F and reminded me that Phoenix was supposed to be deserted because of the unbelievable heat. This suited me fine.

I cruised in along I-10 and took the Thomas Road exit, figuring the name would be an omen. I was looking for a large building where I could get Silver out of the sun. On my left as I headed east, a coliseum presented itself. In the back was a ramp slanting down below ground level. I descended and parked.

The building, Veterans' Memorial, seemed unremarkable and well-preserved. Silver was parked on the east side; the only major damage was a huge hole in the west wall. Though the hole had probably been opened in some sort of siege situation, I decided to scout it just to make sure.

I set the anti-intruder devices on Silver and left him in the dark. I was armed with my Ingram and a flashlight. A loading bay door provided access to the interior of the building. I moved through the shadows like a ghost. As it happened, I was very close to becoming one.

I worked my way through the smooth concrete corridors and huge hallways. Since Phoenix had had a basketball and soccer team, there would probably be a central arena. I also assumed that if someone was in here, the most logical place for him would be the arena.

The whole place was dead quiet. Every sweep of my flashlight revealed dark details and sank other things into deep pools of shadow. Somewhere outside a coyote howled, and I could just imagine a pack of them hunting me in the concrete labyrinth here. I hurried on, wishing for the arena and a clear field of fire. A passage opened on my right and I dashed into it.

I had been right. If there was going to be something in here it would live in the arena. It did.

It was an Ogre.

It flashed two spotlights into life and a red laser targeting dot appeared on my chest. Two forward antipersonnel batteries came to bear, looking like eyes on stalks. In this case, looks could kill. "Don't move," its voice belled into my skull. I didn't move.

This was only the third Ogre I'd ever seen, and it was closer to me than even the one that paced me through my GEV training. Of course, by "close," I mean physically. The only feeling an Ogre is likely to inspire at this range, friendly or otherwise, is absolute terror. My little Ingram did nothing to reassure me.

The targeting dot held steady on my chest. My face felt flushed; I sensed a red glow beside the spotlights. An IR laser? The voice boomed again. "I need you."

"Why do you need me? You're an (unprintably qualified) Ogre!" My amazement echoed through the arena.

"Hey, don't call me names. I am Tactical Recon Unit Azure." It actually sounded offended. "I need you to repair me."

In the glow from its lights I could see that it had been in some fights. The armor on one side was spalled, and there was a small crater in the front facing . . . but there was nothing obvious that would interfere with function. It was a lot better off than the second Ogre I had seen – a treadless hulk that would call out to anyone within range to finish it or die trying. For all I know, it's still sitting outside St. Louis begging to die.

"What's your problem, Azure?"

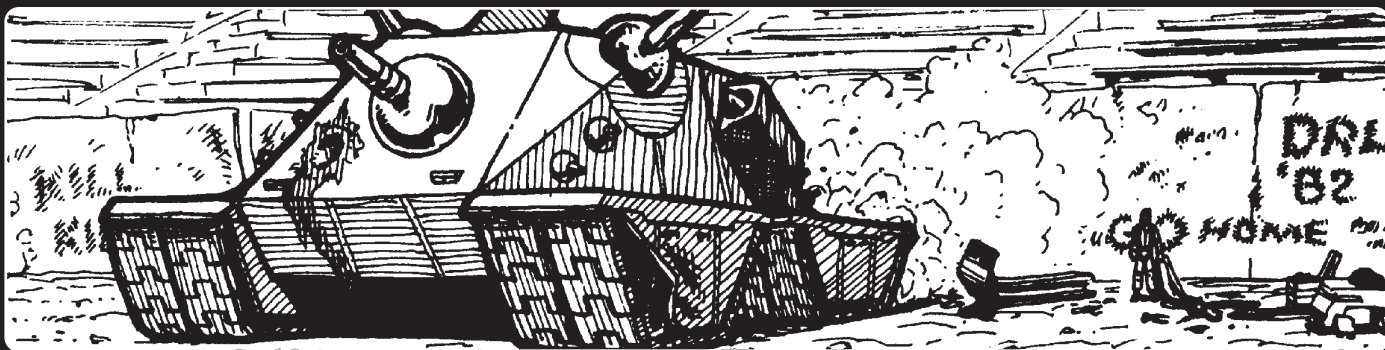
"I can't move."

As my eyes adjusted, I could see something peculiar about the left treads near the front. I started to move closer, then froze. The spotlight rotated to keep steady on my chest, but nothing else happened. I moved forward to investigate.

A length of girder, evidently part of the destroyed west wall, was lodged in the tread. On its way in, it had smashed a couple of rider wheels, but that was no big problem – the Ogre had dozens. I had been around tanks long enough to understand what had really crippled Azure. If he rode very far forward or back, the girder would peel the entire tread off. That would free the Ogre, but only at the cost of most of its speed. The beast was too smart to gnaw its paw off; it would find another way out of the trap.

"How did that happen?" I asked.

"Just lucky, I guess." That was all I ever got out of Azure about it. Whether he'd been attacked in his den and an explosion had driven the obstruction into the tread, or whether he had knocked it down himself and been victim



of an unlucky bounce, he never said. Do machines have pride? Embarrassment? Azure, built to speed through enemy territory and demolish anything fast enough to catch up with him, pinned down by a tiny chunk of mindless metal . . . I would have been embarrassed, too.

"I fix it, then you blast me, right?" I kicked at the girder. It didn't budge.

"No, the markings on your jacket are not listed as those of an enemy. I would have destroyed you long ago if that had been the case." Azure tipped his gun barrels up, half as a sign of good faith, and half, I believe, as if rolling his eyes to heaven at my stupid question.

Of course, the problem with machines is that you can't tell when they're lying. They don't sweat; their voices betray nothing. Once in a while a programmer will set key words to be used when the machine lies – but if Azure had any such, I didn't know them. An intelligent machine, on the other hand, can tell as well as anyone when a human is lying. And Tactical Recon Unit Azure (I found out later) had some special abilities along that line – a multi-ton lie detector. *He* didn't have to gamble on *me*; he knew what I was feeling as soon as I did.

"I can't take this out without tools. I've got gear back in my vehicle. I'll come back." If the thing would just let me out . . . My words hung in the air. Then the voice, seeming somehow subdued, replied "All right. Go ahead."

I walked back across the arena, jogged through the first tunnels, ran through the next ones. By the time I got to Silver I was winded. If I kept the bulk of the arena behind me, I should be safely away in no time.

But standing there beside Silver, I began to have second thoughts. The great machine hadn't attacked me, it had asked for help. That didn't mean much, maybe; it had to have outside assistance, and a dead man couldn't pull that girder out. But it could have blasted me when I said I couldn't do it. Instead it had let me go back "to get tools."

It had trusted me.

Or had it? I remembered the way its voice had lowered when it told me to go. Maybe it hadn't really expected me to return, once I was out of gun range. But it had let me go anyway. It had nothing to lose by releasing me, nothing to gain by killing me. A creature of flesh and blood might have blasted me in frustration. But the Ogre had let me go.

I shook my head. It was crazy, insane, stupid. The machine would kill me. I deserved to die for being an idiot. But I had given my word.

I went back to the cargo compartment for the block and tackle gear. The walk back to the arena was the longest trip I've ever taken.

\* \* \*

An hour later, the girder came free with a horrible grinding squeak. The Ogre rolled back and forth a few feet. "Satisfactory," the voice boomed.

"Right," I replied. "Now you can't kill me."

Azure hummed. "Explain."

"Remember the story of the boy who pulled the thorn from the lion's paw? The lion became his friend for life."

The machine hummed again. "My programming included a complete literature survey. I recall the story. How shall I know you?"

A giddy feeling of relief filled me. "Call me Thom . . . er, the Lone Ranger." I laughed and backed off as his engines came to life again. He said nothing further as he backed out of the arena, shredding what little of the artificial turf had survived his entry.

Once Azure left, I retraced my steps to Silver, climbed in, and told him to wake me 15 minutes before dawn.

Silver woke me on time by drilling into my brain an annoying buzz that had been very effective in the past. I skipped breakfast and left the coliseum as quickly as possible, getting back on Thomas Road, heading east to Central. I went north on Central to a road called Indian School and headed east on it. The map indicated it had curves and a canal running alongside it, making it a more interesting drive than Thomas.

As I hit 62nd Street, Silver crackled, "Incoming missile." The built-up bank of the canal on my left, and a low wall from some housing developments on my right gave me no room to turn and evade. Cursing the Ogre, whose missile rack had been intact, I pulled an old move I had used before to duck missiles. I cut all power to fans.

Silver dropped with a shrill scream of metal and a bone-jarring crunch. My seat belt dug into me as it kept me from flying out through the mask. Then the missile demolished the roadway 100 meters in front of me. The shockwave rocked Silver and me, but did no real damage.

Instantly the radio was alive with chatter. "Chi 4 to Chi 1: Butch, I think the Cub got him."

My mind stopped and backed up. The attack had not been by Azure after all. The boys from Chicago had followed me all the way to Phoenix! In the dead city, I was easy to pick out. I was surprised they had followed me so far, but their nicknaming a unit the Cub and their dogged pursuit indicated that they had indeed taken umbrage at what I'd done to the Sears Tower. The Cubs had made it into the last World Series, the one the Collapse ended. They were beating the Bluejays 3-2 in the series, but the series was never finished on account of revolution. Chicago didn't win and had been sore about it ever since.

"Chi 1 to Chi 5 and 6: Tinker, Evers, can you see him?" A feral grin swept over my face as I realized they had stationed GEVs at both ends of this snakelike section of Indian School. I powered up and drove into the cloud of dust . . . toward the two red dots burning on Silver's map of Phoenix.

Even as Tinker began to frame his answer, Silver broke from the shattered section of road. I shot past their position by swinging to the left and blowing along the bank of the canal. Their gunners tore divots from the bank behind me but never came close. Once I was beyond them I moved to the road, pulled the back fan to half power and powered the front fan into a neat bootlegger turn in the middle of the street.

As Silver spun I trained my gun on Chi 6. Evers never had a chance; I blasted him in the poorly-armored aft section of the hovercraft. As it blossomed into flame, Tinker goosed his GEV forward into the smashed street in an attempt to elude me in the dust and smoke. I missed him. But his buddies, Chi 3 and 4, were coming up fast.

"Chi 1, we have movement on our scanners. He's ours! Fire!"

"No, don't, it's me –" Tinker's radio crackled and died.

I turned Silver, repowering the back fan, and headed south on 68th Street, ignoring the speed limit. "Lone Ranger to Chi 1. Butch, go home."

"Butch to the Lone Fool, you're dead," the radio said to me. In the background I heard, "The Cub has him tracked."

I quickly cut east on Osborn for two blocks and then cut north on 70th Street. The missile screamed over my head and sowed a garden of flames behind me. What was firing those missiles at me? "Ball Two," I chirped into the radio.

I turned and headed back south. Whatever the Chicago missile-thrower was, it had the range on me, my only chance was to double back and take it out before it could lob in a beanball. All the red dots on Silver's map were performing like GEVs, which didn't make much sense.

I pulled into the shadow of an enormous semi which was jackknifed across 70th, then waited. It had been a military transport; the armored body would make good cover if they still had me tracked. Apparently they didn't. Chi 3 and 4 blew past me, escorting the "Cub." I'd seen

some strange pieces of hardware, but the Cub was something new. Some sort of missile launcher had been mated to the body of an air-cushion vehicle. It was bigger than the Chicago GEVs, and looked top-heavy – but it had kept up with them and me all the way from Chicago. I pulled the trigger, picking what looked like a soft spot in the midbody. It wasn't; the Cub slewed around but didn't fireball.

I hightailed it west, Chicago curses ringing in my ears. Chi 3 and 4 were slow to sort it out, but the Cub lobbed another missile at me. It demolished a service station, too close for comfort. Fragments peppered Silver. One of them must have hit an antenna, because my map started blinking erratically.

"What happened?" The Chicago team was forgetting radio procedure. "He hit the Cub, but it's all right. Tracking him again. *What the . . .*"

The dull roar that cut off the broadcast was unlike the sound of the earlier Cub missiles. And my map was getting worse. I could have sworn that it showed two missiles coming from *ahead* of me to take out the Cub. The picture cleared for a second, letting me count dots. Two, four . . . so *something* had happened to the Cub. The four remaining Chicago hovers were strung out behind me – a pair and two singles. I keyed the Chicago frequency again.

"Butch, that's three out, two on a double play. Give up?"

I swear he cursed and said, "Play ball!" That was fine with me; it was my turn to hit. I blew Silver west through some backyards and came to rest behind a house. The garage was not attached and the space between the house and garage gave me a perfect view of 68th Street. As I expected, Chi 3 and 4 were speeding towards my last-known position.

I aimed my first shot low, exploding it beneath Chi 3's front fan. It reared up and Chi 4, traveling too fast and close to dodge, clipped it in the tail end. Chi 3 flipped and came down in its roof while Chi 4 spun out of control into a brick house on the west side of the street. Both GEVs exploded, spraying metal and fire all over the street. I considered it a double and gave Chi 4 an error on the play.

Chi 2 was a single. The pilot was good, but he was too used to working with wingmen. Because of the circumstances a bit beyond my control, I was used to working alone and I'd developed all sorts of unorthodox tactics. We began circling in a deserted parking lot, our turning radii keeping us just out of the other's sights.

I killed power to my back fan. My tail end dragged and pulled me in a tighter circle. His gunner fired and missed while he cruised right into my fire.

I tried to restart my back fan. No go. The hard landing must have damaged it. I popped the hatch and climbed out to check it. Then I heard Chi 1. He came screaming round the corner, Chicago insignia glittering in the morning sun. For some reason, he didn't fire – yet. The GEV cut power and settled to the cracked cement fifty yards away.



His exterior speaker came to life. "This is your Mudville, Casey!" His AP weapons focused on me; he'd want to take Silver intact. Briefly, I regretted not dodging behind my trusty steed and making Butch do it the hard way.

But we had both overlooked something. "Look out behind you!" I yelled, almost without thinking.

"You expect me to fall for that old trick?" Butch scoffed. "Good-bye, Lone Fool."

Azure blew all the insolence out of him with a single shot. The shockwave threw me back against Silver; a fragment pinged off the armor. In response, I heard the rear fan hum to life. The next thing I knew, I was in the cockpit facing Azure. "Showdown?"

The mechanical voice replied, "Is it?"

"'Twould be a pity. We work well together."

"True. This could be the start of a beautiful friendship."

I laughed. "Let's go. But you'll need a new ID. How do you like Tonto?"

"Plenty fine, kemo sabe, plenty fine."

We headed off across the desert.

## THE NINJA AND THE CUB

The background and setting of "The Lone GEV" are different from those of the *Ogre* and *G.E.V.* games. It's years later; governments are fragmented, whole regions of once-habitable land are deserted. A ragged, semi-feudal system extends across much of North America; the no-man's-lands between controlled territories are rife with bandits and outcasts – not to mention lunatics like Thomas Kerin III.

And, as ever, technology follows necessity. In the last few years before the Collapse, it became evident to military leaders that an Ogre was only useful when it could get close enough to destroy its objective. Of course, "close enough" could be kilometers away – but when electronic surveillance picks up the machine at 30 clicks, and defensive units stop it dead fifteen clicks off, something is lacking.

What was needed was a faster, sneakier machine – more maneuverable, less detectable. Thus was created the "Stealth Ogre," also known as . . .

### THE COMBINE "NINJA"

The Ninja is the size of the venerable Mark III but equivalent in cost, power, and usefulness to a Mark V. It's among the fastest of the Combine cybertanks, with a movement of 4. Offensive armament has been traded off for speed, intelligence, and defensive electronics and weaponry. The record sheet looks like this:

1 Main Battery (4/3; D4) ○  
2 Secondary Battery (3/2; D3) ○○  
2 Missiles (6/5; D3) ○○  
1 Missile Rack (D4) ○  
4 Missiles (internal) (6/5) ○○○○

8 Antipersonnel (1/1 vs. infantry or CP only; D1)  
○○○○ ○○○○

40 Tread Units:

○○○○○ ○○○○○ (M3)  
○○○○○ ○○○○○ (M2)  
○○○○○ ○○○○○ (M1)  
○○○○○ ○○○○○ (M0)

In addition, the Ninja is loaded with ECM, ECCM, etc. It can baffle surveillance equipment until it's uncomfortably close, jam weapon guidance systems, and shoot down incoming projectiles. Subtract 1 from the die roll of any attack made against the Ninja except for infantry overruns.

As a limiting factor, always use *G.E.V.* overrun rules. This should apply even when you're playing strict *Ogre* scenarios.

The Ninja can be used in place of a Mk V in appropriate scenarios.

### THE CUB

The other unit mentioned in the story, the Chi Cub, wasn't the result of long-range tactical planning, but of quick-and-dirty ingenuity and experimentation. It's a custom-built unit combining most of the speed of a GEV with the offensive punch of a Missile Tank – in theory, at least. Its particulars:

*Movement:* 3/2 – that is, three hexes the first phase, two the second. It's bulkier and less streamlined than a regular GEV, so it can't move quite as fast.

*Terrain Reaction:* Since it's an air cushion vehicle, treat it as a GEV for all purposes when figuring terrain effects.

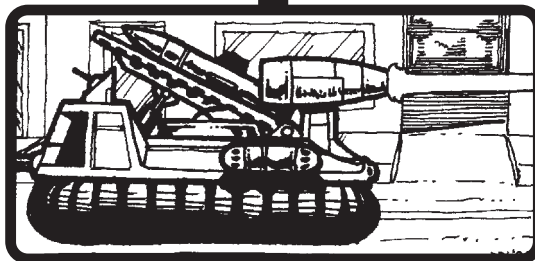
*Defense:* D2, the same as a GEV.

*Attack:* 3/4, same as for a Missile Tank.

*Cost:* In a game of *Ogre* or *G.E.V.*, a Cub unit would cost two armor units – the same as a howitzer or MHWZ. Furthermore, neither player should be allowed to take more than a couple of these units. By their nature, they would not be available in large numbers.

*Variant:* A unit like this could be considered a real jury-rig, made by combining two damaged vehicles. Cost would be only 1 armor unit instead of 2 – but any D result counts as an X. The unit is not really destroyed, but it's out of action for longer than the battle would take.

*Variant 2:* Instead of a missile tank system, mount a heavy tank gun on a GEV chassis to produce a 4/2, D2, M3/2 weapon – same costs.



**A**nd here's my own take on The One True Way To Play. Okay, make that One Of The True Ways To Play. Or at

least What Works For Me. This was written in 1983, but I still stand by it.

# BASIC OGRE STRATEGY

## By Steve Jackson

It's probably bad manners for me to admit this . . . but *Ogre* is still one of my favorite games. And I *know* it's bad manners for me to say *this*, even though it's true: I very rarely lose. Every so often I get to play a demonstration game at a convention and, much more often than not, I walk all over the other guy. Especially if I get to play the Ogre.

I'd like to think this is raw talent coming to the fore, but a much likelier explanation is that I've played the game ten times as often as the other fellow. Practice may not make perfect, but it certainly helps – *especially* with the Ogre. Some of the best tactics for the killer robot aren't obvious.

The Ogre's obvious advantages, of course, are its tremendous firepower and its near-invulnerability. Its less-noticeable advantages (the ones that your opponent may not be ready for) are its ability to pick its entry point and to set the pace of the game. In spite of appearances, the Ogre needs *all* its advantages. Against a competent defender, the Ogre that simply bulls toward the command post, mindlessly shooting at everything in range, will lose.

## CHOICE OF ENTRY

This is your first decision. If your opponent is smart, he will have set up his command post as far back as possible. It'll probably be centrally located. Wherever it is, you should probably enter in a fairly central location. Exception: If the CP is set up in one corner, with a tight knot of defenders around it, you should enter in the *far* corner, maximizing the travel time to the CP, to tempt the defender to "unknot" and split his force.

Once you enter, you don't have to move in a straight line. The Ogre is powerful, but it shouldn't behave like a mindless juggernaut. Its mobility is better than many of its foes', and as good as all the rest except those pesky GEVs. By jinking back and forth a few times as it moves in, the Ogre can get an unskilled defender badly snarled up, and keep even a skilled defender from laying a trap. In some circumstances, you can lure your foes out toward the

unobstructed end of the board, back up, and then charge right past them. If you are still moving at 3, they may never catch up!

## SIDESLIP

A corollary of the "jinking" trick is the tactic of slipping toward the side of an enemy group. Faced with (for instance) a dozen heavy and missile tanks, the Ogre can do two things. It can charge into the middle of the group. If it has enough guns left, it may kill half the defenders; the other half will counterattack on their turn, and do serious damage. A likely result from six tanks attacking is two Ogre guns lost. This doesn't seem like much, but it adds up!

So . . . what does the smart Ogre do? Not retreat – just sideslip. Instead of moving toward the center of the enemy group, the Ogre goes toward (or past) the edge. It then attacks as many enemies as possible. Having fewer targets, it scores fewer kills – maybe only two or three. But few or *none* of the surviving enemy will be able to counterattack! True, not every defender will let you do this more than once. But even once in a game can give you an edge. And as long as your enemy is willing to feed you units a few at a time, you might as well take them. Your ammo is free, but you can't replace your guns. Which leads us to a very important principle –

## DIVIDE AND CONQUER

Whenever you can, you should seek to engage only part of the enemy's forces. He, in his turn, will seek to concentrate his force against you. Some cases:

(a) Faced with a defense built around a protective "umbrella" of two or three howitzers, hang back for the first few moves, jinking even more than necessary. Give those defending units time to come to you. If they do, you've split the force into "fast" and "slow." If you can deal with the faster units *outside* the howitzer umbrella, you'll avoid taking unnecessary hits.

(b) Another point when dealing with a howitzer umbrella: study it! If the opponent has carelessly divided his own forces by leaving a gap in the coverage – a row of hexes covered by only one howitzer or even a path around the edge of the umbrella – use it!

(c) If the opponent takes no howitzers at all, “divide and conquer” is still important. Hang back as before, and encourage his fast units to come out to meet you. A player that doesn’t believe in howitzers will often choose a very large number of GEVs. You *must* deal with these while you still have both movement and guns; your first objective should be to wipe out GEVs, even if it means moving sideways or backwards to pinch off isolated units. As long as the enemy thinks you’re more interested in the CP, he may put GEVs behind you; you can shock him badly by turning around and wiping them out.

(d) In the endgame, when your Ogre’s speed is down, you no longer control the pace of the game. This is the time for the Charge of the Extremely Heavy Brigade – grinding toward the CP. But this doesn’t mean you must ignore enemy units. Quite to the contrary – sometimes it’s best to sacrifice a hard-won hex of distance if it lets you destroy an incautious enemy. The slower you’re going, the more turns each enemy unit has to put further damage on you, and the more advantage you can get by destroying it early. The ultimate example: Faced with a howitzer some distance away from a CP, but covering that CP, the slow Ogre should probably aim for the howitzer first! Once it’s destroyed, the Ogre can make its way to the CP in peace. If the CP is the first target, the howitzer may have enough time to destroy the Ogre totally. (Of course, if it looks like you may not last more than a few turns anyway, go for the CP first!)

## PROPER USE OF MISSILES

There is no “one best target” for your missiles. My only rule is – don’t let the enemy destroy them! Some players believe in keeping a few missiles back as a threat. I don’t think that’s a good idea. Consider: It will probably take two or three shots to destroy a missile. But a properly-used missile will destroy its target every time – and that target will then fire *no* more shots. What do I mean by “properly-used”? Either fire it at a low-defense unit like a

CP or HWZ, guaranteeing a kill, or hit a unit in the Ogre’s line of march, so disabled units can be finished off next turn with gunfire or ramming.

Target choice must be ruled by tactical position. If several units are advancing from within a howitzer umbrella, you may want to salvo all your missiles at once and fry the closest half-dozen. (If your opponent argues that you can only fire two missiles per turn, he’s right – according to the first-edition rules. Later editions dropped this limit.) If, on the other hand, the enemy units are coming a few at a time, you don’t need to use your missiles as soon. And if all the enemy units are hanging back at the edge of the howitzer umbrella, you may want to go right up to the edge and dash in, firing at the howitzers themselves. Whatever you do, don’t waste your missiles. The sooner you use them, the sooner you cut down on the enemy’s numbers. The best targets, obviously, are CPs and HWZs, but *any* armor units except light tanks are worth hitting. (Caveat: If you’re faced with a very large number of GEVs, your missiles may be the *only* way to get them all.)

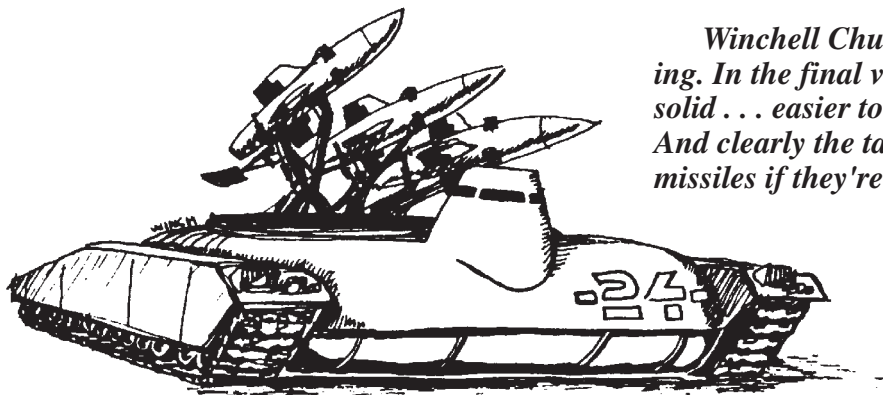
## USE OF TERRAIN

This is simple but important. As the Ogre, you can’t afford to ignore terrain. Rubble doesn’t affect you, but it *does* affect your foes. In the endgame, you can pass beside a crater or rubble line and “scrape off” trailing foes.

Some players rely on the “edge of the map” strategy. I don’t like this; you lose in predictability what you gain in safety. But the fact remains that a unit near the map edge may be fired on from fewer hexes than a unit in the middle of the board. This is why most defenders will put their CP in the middle, and why you should avoid central positions if there is a chance you may be surrounded and swamped.

To recapitulate: The Ogre should play aggressively, but carefully. Fire missiles and sideslip when necessary to avoid being attacked by large numbers of units at once. Study the enemy dispositions; take advantage of the Ogre’s speed and firepower to isolate and destroy small enemy detachments. The “Charge for the CP” tactic is only to be used in desperation.

I’ve smashed a lot of command posts with these tactics; you can do the same. Good luck.



*Winchell Chung’s original Missile Tank drawing. In the final version, the rack arrangement is solid . . . easier to cast in metal, and more durable. And clearly the tank can’t carry a large supply of missiles if they’re really this big . . . so they’re not.*



**H**ere's a far better approach to self-destruct than that given in the original rules. Having said that, I'm really not sure that it would often be worthwhile to build a whole Ogre just to carry a nuclear device. In the first place, the *Ogre* background assumes that many battles, if not most, are fought to capture an objective, not to destroy it and the surrounding countryside. And in the second place, wouldn't it usually do better to deliver your bomb by stealth, or by speed and numbers (i.e., firing a *lot* of missiles) than by mounting it in a huge clanking tank with a target painted on the side?

But once in a while, sure, this might work better than a volley of missiles or a traitor with a truck. And it makes a good game. (And imagine a roleplaying scenario that starts with a battered Goliath parked in the middle of an enemy city, just itching for an excuse to blow up if the local resistance gets out of line . . .)

One more note. I like the idea of the fallout rule described here, but all armor units and battlesuits would be NBC-sealed . . . only unprotected militia and civilian vehicles would be affected the moment the fallout hit them, even if it was very heavy and deliberately dirty.

# THE SUICIDE OGRE: GOLIATH

By Tim Solis

Lieutenant Nugent watched the horizon. The sensors in his helmet were picking up something . . . something big. Then, along the curving, battered highway, a distant flurry of dust became visible.

"Delta Six," Nugent said into his microphone. "This is Victor Seven. I've spotted something at about two o'clock from your position. Relaying visual now. Over."

"Roger, Seven," Captain Phillips replied. "We've got visual now from a drone. Looks like an Ogre; Mark III, I'd say, moving directly toward us. No other units."

Another voice came in. "Delta Six, this is Tango Sierra. We have target acquisition from drone and ground triangulation."

"Roger, Tango Sierra," the Captain replied. "Commence firing."

Safely off to the side, Nugent watched as the huge vehicle rolled toward the city skyline. It was as big as an Ogre, but it looked nothing like any Ogre he had ever seen before. It seemed more like some monstrous beetle, with the sun glinting off its smooth, rounded back. Then, suddenly, it disappeared in a veil of smoke and glare from Tango Sierra's howitzers.

The lieutenant looked at his men, who had now positioned themselves along the ridge, waiting for the order to attack. He spoke again into his headset.

"Delta Six, this is Victor Seven. We're ready to move in and close up the rear, over."

"Negative, seven," answered Captain Phillips. "Hold your position . . . Well, look at that! You oughtta see this, Victor Seven. This Ogre's got no weapons, least not any we can see. Between us and Tango, it'll be finished in no time."

Still the enemy tank pressed on, although now at a much slower pace, through the artillery barrage until it reached the outskirts of the city.

Nugent listened as the Captain's voice crackled over his headphones.

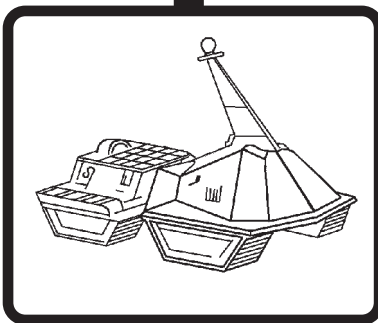
"Cease fire, Tango Sierra. The Ogre's within range of my tanks – a sitting duck. We'll take it from here, out."

"Acknowledged, Delta –"

Nugent saw a blinding flash of light from the city and heard a burst of static in his headphones. Then a wall of air, traveling over 450 kilometers per hour, crushed him in his BPC-armored suit and threw his lifeless body, along with other debris from the nuclear blast, away from ground zero.

\*\*\*

Meet Goliath – a Mark III Ogre, stripped of all missiles, batteries, and antipersonnel weapons. Because of its lightened load, it moves a little faster than a regular Mark III. But with no weapons to protect itself, Goliath is incredibly vulnerable to attack, especially by infantry units in an overrun situation.



## GOLIATH

40 Tread Units starting at 4 MA.

○○○○○○ ○○○○○○ (M3)

○○○○○○ ○○○○○○ (M2)

○○○○○○ ○○○○○○ (M1)

○○○○○○ ○○○○○○ (M0)

As you've probably guessed by now, Goliath is a kamikaze tank. Its mission is to get within range of its designated objective, and then self-destruct. It can also be used to approach a strong line of defense and detonate, opening a gap for friendly units to pass through. Goliath can even be used to probe for mines when players decide to use that option.

### RULES FOR GOLIATH

Goliath is subject to the same rules of movement, ramming, etc., as other Ogres, except that it may transport infantry (up to three squads) in a manner similar to light and heavy tanks. It rams like a Mark III.

Goliath may self-destruct at any time its owner wishes, with the following results:

(1) Any Ogre in the same or adjacent hex is destroyed. At a range of two hexes, all of an Ogre's missiles and half of its remaining secondaries, AP, and treads (round down) are destroyed. At three hexes, half of the missiles and a third of its remaining AP and treads (again, round down) are destroyed.

(2) Other units are affected as per the chart on page 100. Count the distance in hexes from Goliath to each other unit, and apply the attack odds (or automatic result) indicated.

(3) All mines within six hexes are detonated.

(4) If Goliath detonates in water, add three hexes to the effective distance to each unit – except that anything in the Ogre's detonation hex is considered destroyed.

Note that the use of Goliath does not require players to give the same self-destruct ability to all Ogres in the scenario. In fact, if Goliath is used, other Ogres should be *denied* the self-destruct capability (unless extra armor units are "spent" to buy them the bomb to carry). The only way to render Goliath unable to explode is to score a critical hit on it, "cracking" it open. See "The Golden BB" on p. 101.

## GOLIATH

### NOMENCLATURE:

COMBINE  
Mk III-G,  
"GOLIATH"

LENGTH: 19 METERS

WEIGHT: 250,000 KG

OPTIMUM ROAD

SPEED: 90 KPH

CROSS COUNTRY

SPEED: 60+ KPH

MAXIMUM ARMOR: 3

METERS BPC

CREW: UNMANNED

CYBERTANK

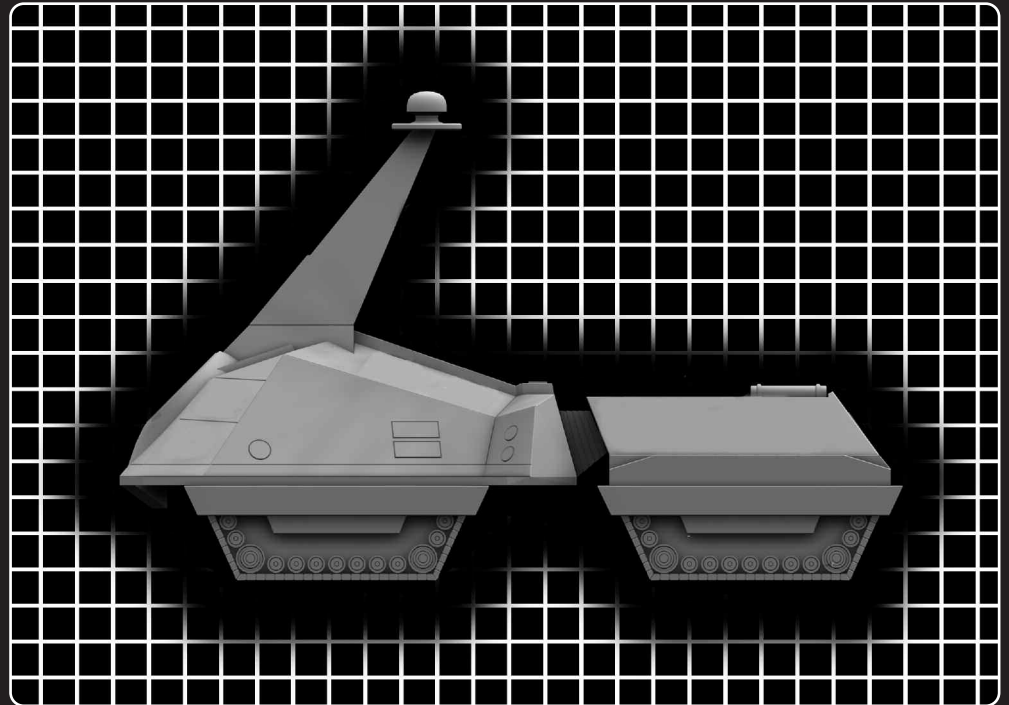
WEAPONS: SELF-

DETONATING

POWER PLANT

EQUIVALENT TO

7.627 MEGATONS OF TNT



COMMENTS: ESSENTIALLY A SELF-PROPELLED NUCLEAR WARHEAD ON A MODIFIED MARK III CHASSIS, THE GOLIATH CYBERTANK WAS FIRST INTRODUCED IN 2083. IT MET WITH LIMITED SUCCESS UNTIL THE THIRD BATTLE FOR ROUM, WHERE A GOLIATH PENETRATED THE PANEUROPEAN LINES AND DESTROYED A LARGE PORTION OF THE ENEMY'S COMMAND CENTERS, RAILWAYS, AND ARMOR RESERVES.

## RADIATION / FALLOUT

As an option when using Goliath, you may use the following rules for radiation and fallout effects.

When Goliath detonates, the hex it was in and all adjoining hexes immediately become too contaminated for any non-Ogre units to enter for the remainder of the game. This contaminated area expands one hex in all directions at the beginning of Goliath's turn for the next two turns. On the third turn after detonation, a fallout corridor seven hexes wide begins advancing across the map. Roll 1 die each for direction and speed.

| Roll | Direction | Speed            |
|------|-----------|------------------|
| 1    | N         | 1 hex per turn   |
| 2    | NE        | 1 hex per turn   |
| 3    | SE        | 1 hex per turn   |
| 4    | S         | 2 hexes per turn |
| 5    | SW        | 2 hexes per turn |
| 6    | NW        | 3 hexes per turn |

The fallout corridor marches in a steady and leisurely way until it reaches the edge of the map. It remains in effect for the duration of the game. Any non-Ogre unit caught in or entering the fallout corridor is destroyed.

It is recommended that you use blank counters to mark the corridor's progression.

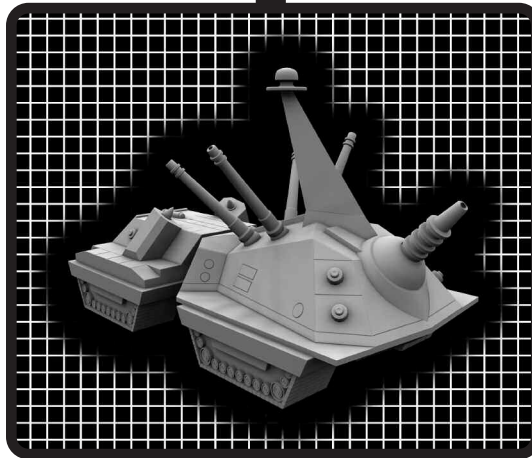
## VICTORY POINTS AND STRATEGY

A trapped or detonated Goliath is worth 50 victory points to the opposing player. This VP cost will prevent a player from self-destructing any time a Goliath unit is stuck in

a swamp or low on treads. There's no point in pulling the plug just to take a few measly enemy units with you . . . as long as there's some chance that your side will hold the field. Realistically, a Goliath device would usually be far too costly to waste unless the objective was considered crucial.

Take, for example, the "Raid" scenario in *G.E.V.* A prime target for Goliath would be the city and river bridge at the southeast corner of the map. Why? Because if Goliath is detonated in just the right hex, the attacker will receive a total of 80 points for the destruction of the bridge and town hexes plus whatever he earns for any enemy units caught in the blast. Thus, even with a 50-point expenditure, he comes out ahead. Another good target in this scenario would be the city to the northeast, if it's occupied by enemy units.

In a scenario where a Mark V is worth 12 and a III is worth 8, a Goliath should be worth 5, and a bomb to provide self-destruct capability to any other Ogre should be worth 1. (Note that, as per *G.E.V.*, these are not true costs; if one side doesn't take at least one Ogre, it should lose.)

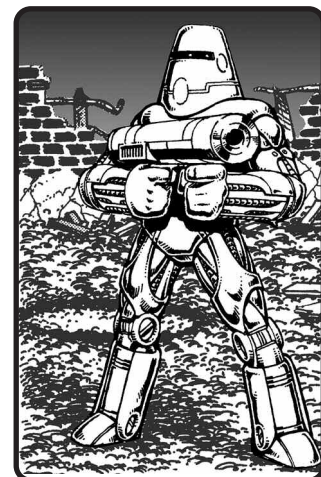


## FINAL OBSERVATIONS

Don't ever send a Goliath charging around the map as you would an Ogre. It can't protect itself and, once it blows up, it's gone. Use it carefully. You should probably provide some units to escort it to its objective and to help discourage a massive attack against it. The best escorts are GEVs (because they can get out of the way quickly) and Ogres (which will be undamaged if they move far enough away from the point of detonation).

Goliath should add a few twists to your strategies. It will solve some old problems – and provide some new ones.

| Unit Type          | X | 4-1 | 2-1 | 1-1 | 1-2 | NE |
|--------------------|---|-----|-----|-----|-----|----|
| Bridge             | 0 | 1   | -   | -   | 2   | 3+ |
| Road or RR         | 0 | 1   | -   | -   | 2   | 3+ |
| Town or Forest     | 6 | 7   | 8   | 9   | -   | 10 |
| Heavy Tank         | 2 | 3   | 4   | 5   | -   | 6+ |
| Missile Tank       | 3 | 4   | 5   | 6   | -   | 7+ |
| Light Tank         | 4 | 5   | 6   | 7   | -   | 8+ |
| GEV                | 4 | 5   | 6   | 7   | -   | 8+ |
| Infantry           | 5 | 6   | 7   | 8   | -   | 9+ |
| Howitzer           | 5 | 6   | 7   | 8   | -   | 9+ |
| Train              | 5 | 6   | 7   | 8   | -   | 9+ |
| Command Post (D0)  | 5 | 6   | 7   | 8   | -   | 9+ |
| Command Post (D1+) | 3 | 4   | 5   | 6   | -   | 7+ |
| Mobile Howitzer    | 6 | 7   | 8   | 9   | -   | 10 |
| Mobile CP          | 6 | 7   | 8   | 9   | -   | 10 |





# THE GOLDEN BB: CRITICAL HITS IN OGRE

By Steve Jackson

The *Ogre* rules require a defender to batter Ogres apart a piece at a time; they make no provision for the single lucky shot that might doom the giant cybertank. This plays well enough, and makes a certain amount of sense. Logically, weapons would be far easier targets than an Ogre's few vulnerable spots. But everything has its weakness, and everyone gets lucky once in a while. It could happen.

The following "critical hit table" gives players the chance to try for a lucky shot. It was inspired by Tim Solis' "Goliath" article; in Tim's original draft, the only way to attack a Goliath was to shoot at the treads. When the last tread was gone, the bomb could no longer function. That's drawn straight from the *Ogre* optional rule for self-destruct . . . but I never liked that rule too much anyway. It seemed worthwhile to give another defense option – and to protect that bomb!

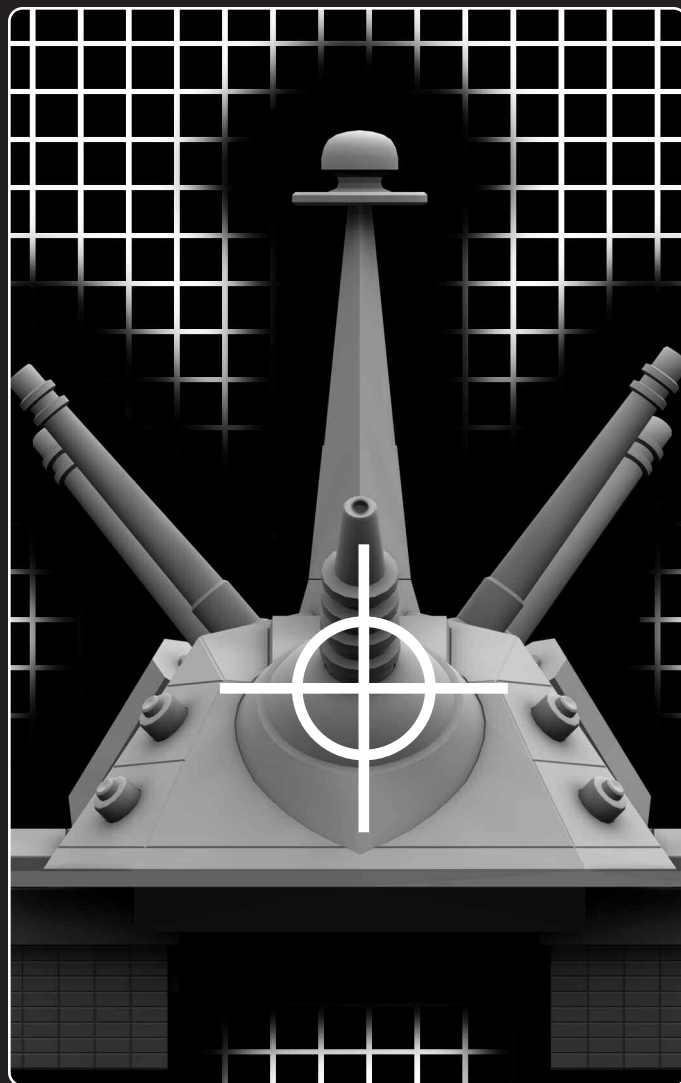
Any or all of the units attacking an Ogre may be allotted to a critical hit attempt. Only one attempt may be made per Ogre per turn or overrun round. The units attempting a critical hit may not attack other targets during the turn – instead, their firepower is totaled into one attack and three dice rolled on the table below. For instance, two Heavy Tanks, with a total attack strength of 8, would need to roll 16 or better to score a critical hit on a Mark III. A successful hit cracks the target open, eliminating it completely!

| Attack Strength | Die Roll | % Chance |
|-----------------|----------|----------|
| 1               | 19       | 0.00     |
| 2-3             | 18       | 0.46     |
| 4-5             | 17       | 1.85     |
| 6-11            | 16       | 4.63     |
| 12-20           | 15       | 9.26     |
| 21-30           | 14       | 16.20    |
| 30 or more      | 13       | 25.93    |

#### Modifiers:

- Subtract 1 from the die roll for a Mark V or VI, or for Goliath or the Ninja.
- Read the table as written for a Mark III, III-B, IV, or Fencer.
- Add 1 to the die roll for a Mark II. Add 3 to the die roll for a Mark I.

The variant is probably best for a miniatures game or a scenario involving several Ogres. In a straight game of *Ogre*, use of critical hit rules can turn the game into a rout if the defender tries for a critical hit and misses; a missed attempt at a critical hit leaves the Ogre undamaged and free to rampage through its foes. On the other hand, if the defender does score an early critical hit, the game is over . . .



This was a true collaboration. I can't remember exactly what Craig sent and what I added, but as I reread it, I see scenes that I know I could never have come up with . . . and other scenes that I know were my own visions. In general, the people were his and the Ogres were mine; it was ever thus.

The scenario (p. 105) introduced several units that were officially added to the game in *Shockwave*. It's been

modified a bit for consistency with the current rules. However, I left the Laser Tower rules as they were in the original magazine article, just to show how they evolved. The old rules are a bit simpler; the new ones are, I think, better balanced. The biggest change is that in the *Shockwave* rules, the lasers only fire once per turn!

# ICEPICK

By Craig York and Steve Jackson

In the near-freezing water at the bottom of the Arctic Ocean, three great shapes churned up clouds of silt as they neared the Siberian coast. They spoke to one another in numbers, their whole conversation lasting milliseconds.

"Icepick Leader, this is Icepick Two. We are within projected range of enemy motion sensors."

"Contact definite, Icepick Two. I just rolled over one. We can expect underwater anti-commando squads at any time now."

"Icepick Leader, this is Icepick Three. I have multiple contacts to the east at a range of 6,000 meters. Readings consistent with marine battlesuits."

"Icepick Two, do you have any contacts yet?"

"Negative, Icepick Leader."

"Nor do I. Icepick Three, break off and proceed east. Stay under the ice as long as possible. Go for the eastern shore battery. Icepick Two, take the lead and proceed north."

The grade grew steeper as they neared the shore, and the meager sun of early May filtered weakly through the breaking ice.

"Icepick Two, we have incoming fire."

Nuclear explosions wiped away the covering ice and sought the machines beneath. Through flame and steam, the Ogres rolled on.

"Report status, Icepick Two."

"Undamaged."

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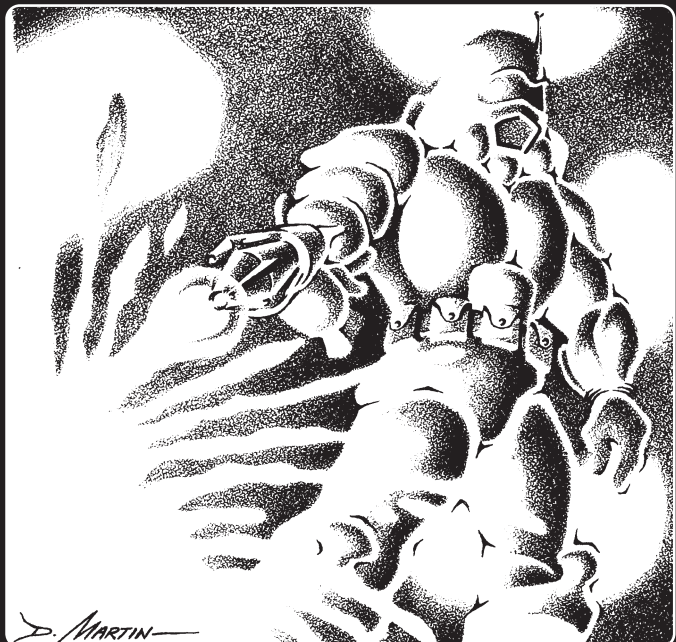
The major's afternoon walk was interrupted by the signal buzz of his radio. He pressed the respond button and spoke into the mike. "Makharov here. Go ahead, station."

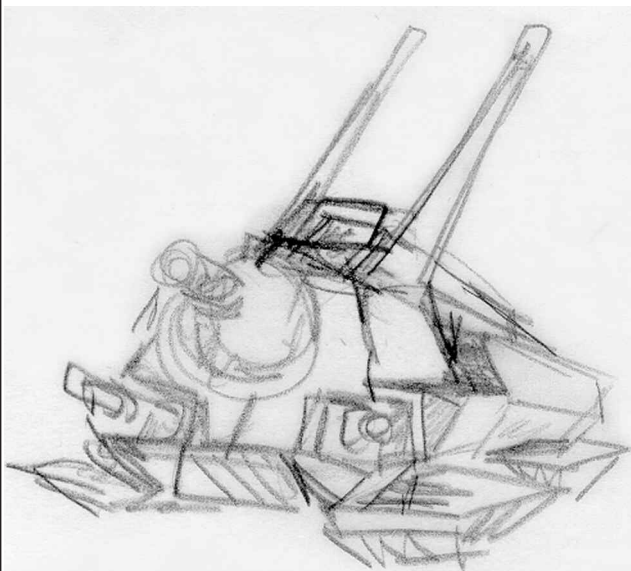
"Major, this is Colonel Androvitch. What is your location?" The colonel sounded worried.

"I'm six kilometers north of the station, just west of the road on the south bank of the Iesta. What's going on?"

"You will proceed back to the station immediately. Androvitch out."

"But I'm on foot . . ." Makharov responded, even as contact was broken. His consternation eased somewhat as he heard the familiar whine of a ground effect vehicle approach. Then the hairs on the back of his neck stood straight up as he recognized an equally familiar, but totally unexpected, sound. The shore batteries were firing.





**A Winch sketch that we didn't follow up  
... a two-tower version of the Ogre.**

\*\*\*

The major studied the young hovercraft pilot who had picked him up. He hadn't seen her before. From a German unit, by her shoulder patch. And the name badge over the breast: Zahn. "Lieutenant Ulrike Zahn?"

"I am she, Comrade Major." Formal, thought Makharov. Definitely, very German.

"You must have just gotten off the plane. I wasn't expecting you for two more days."

"Comrade Major, have you not been informed? We are under attack."

"By whom?"

"By what, Major. Cybertanks."

"More than one?"

"Two, according to the infantry report."

"And their type?" he almost whispered.

"Either Mark III or a modified Mark II. The observers were uncertain."

"Merciful God. We can't handle two Mark IIIs."

"But we have a very good chance if they are Mark II units. Especially since the addition of Battery Rudolf. The Mark II is underarmored."

"You are surprisingly well-informed for a lieutenant. You are a Party member, I assume?"

"Comrade Major, I did not mean to . . ."

"Answer the question."

"Yes, Comrade Major. I am a Party member."

"Good. I would not want to die under an Ogre's guns without the blessing of St. Lenin. Now turn this machine around. And acknowledge no further transmissions from Station Andropov until I tell you otherwise. I haven't time to waste debating strategy with the Colonel."

That ought to put a boil on her party hide, Makharov thought. Instead, she grinned like a cat and threw the hovercraft into a tighter turn than any Makharov had seen in some time. *It's a good thing I skipped lunch*, he reflected.

"You're a pretty good pilot, Lieutenant – for a party member. Tell me, have you ever faced cybertanks before?"

"I was at Gibraltar, Comrade Major." She said nothing else, and Makharov began to check the guns.

\*\*\*

"Icepick Leader, this is Icepick Three. I eliminated the gun, but lost treads and a secondary. How shall I proceed?"

"Icepick Three, are you still capable of rated speed?"

"Affirmative, Icepick Leader."

"Proceed due south. The briefing showed a bridge about six kilometers down the road. Cross it and hold station among the buildings if attacked; otherwise proceed directly against the installation."

"Icepick Leader, this is Icepick Two. Have broken surface. Briefing was in error; I am taking fire from at least one shore battery other than the one on the pier. Minor tread damage. Instructions?"

"Attack the pier, Icepick Two."

\*\*\*

"... hit it as it came out of the surf! Major, the pier is completely gone."

"What about the infantry?"

"Third and fourth squads are right behind them, sir. Sixth was on the pier with Battery Nadia. Others are making best speed this way. Sir, we are getting a call from Group Lansky; they're coming in off the ice, about two clicks out."

"Group Lansky, this is Major Makharov. Do you read?"

"Group Captain Bledenev, Major. We have targets in sight. One is definitely a Mark II, but the other one is bigger. Shall we proceed?"

"Do what you can in one pass, Captain, then proceed east at speed. There's another one on Gorky Road; it took out Olga and is heading for the station. Catch it on the bridge and drop it into the swamp if you can. Makharov out." With the perfect vision of hindsight, Makharov regretted his failure to insist that the bridges be mined.

"Major, we are in position, awaiting orders." It was the Frenchman, Captain Blanchard. He had arrived the week before with a dozen factory-fresh light tanks. Staff had ordered a field test in Arctic conditions. They'd get it. He only hoped Blanchard lived to make the report.

"Captain, you are to encircle the enemy. Under no circumstances attempt to close with them; leave that to the hovers. Get between them and the sea. Order your men to concentrate fire on the lead vehicle's weapons. I will lead Group Iestagrad on its companion."



"Understood. Blanchard out." At least his Russian was good, thought the major.

"Major, the station reports taking severe damage."

"Where, Lieutenant?"

"Admin building. No damage to the lasers or the reactor. Sir . . . the colonel was there."

"So it goes . . . There's Group Lansky. Take us in on the big one, Lieutenant."

Battery Rudolf, the surviving howitzer, finally ranged the trailing Ogre. A direct hit shattered the right rear tread housing. The Ogre paused, then lurched forward again, trailing pieces of its suspension. The Ogre's remaining missile swiveled to the rear, but even as it lifted from the monster's back, tracer fire danced over the missile, deflecting it to the ground well short of its intended target. It did not explode.

Amid the smoke and ash, Group Lansky roared by the leading attacker, right under its guns. Three of the group's number sped past it and away; the fourth was caught beneath the treads as the Ogre suddenly veered to the right.

The trailing Ogre filled the windscreen ahead, and Makharov concentrated his fire on the main gun, even as Battery Rudolf scored again, smashing more treads. Behind him, Group Iestagrad came in, while Lieutenant Zahn threw the GEV around like a sport-hover as they circled for another pass. They sped back at the Ogre, passing Shermayev coming out of his run. Kropotkin hadn't made it, nor did Shermayev get much further.

Makharov's eyes widened. Blanchard was ignoring orders; his light tanks were charging like cossacks. Three of the small tanks were hit, and the rest broke in every direction. *Well, that's one way to encircle it*, thought Makharov. Then he noticed that the Mark III's main gun was drooping brokenly. One of Blanchard's men had gotten it, but three of the secondaries were still spitting fire.

Suddenly, the leading cybertank – the Mark II – was silhouetted in a fireball. Battery Rudolf had changed targets and scored again. They were earning their rations today. "Battery Rudolf, this is Makharov. Go back to your original target. The leading one is scrap."

\*\*\*

"Icepick Leader, this is Icepick Three. My treads have been disabled by laser fire. I am immobile, 1,700 meters from the target installation."

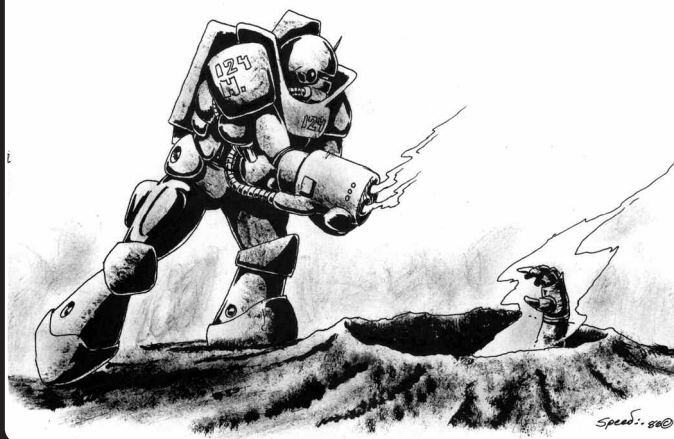
"Icepick Three, what is your weapon status?"

"Icepick Leader, I have a secondary battery and three AP guns. Wait. Correction: I no longer have a secondary battery."

"Icepick Three, what is installation status?"

"Icepick Leader, the laser tower is located 0403. I fired on it but did no evident damage. A complex of buildings at 0404 has been eliminated. Two hovercraft from the force that engaged me are proceeding in your direction."

"Icepick Leader, this is Icepick Two. I am now immobile. If you survive to return to Base, it is suggested that you point out that Icepick Three and I were needlessly expended due to faulty intelligence work. Forces here were 50 percent greater than anticipated. It would have been . . ."



The smaller Ogre's analysis ended in a crackle of static. Icepick Leader would have to complete the mission alone.

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"Major, Battery Rudolf reports that the big cyber has moved out of range." *We're on our own*, thought Makharov. The station was barely seven clicks ahead, and the surviving Ogre was making excellent time down the road, even with its damaged treads. Fifteen minutes, and it would be in range of the tower. Twenty minutes, and it wouldn't even need guns. It could walk right over the base. *Just like Gibraltar*, he thought. He had no time to dwell on this, however, as Zahn spun them and headed in again. *Like a ballerina*, thought Makharov, as he began firing.

\*\*\*

Icepick Leader counted the meters to the laser tower. Its gun barrels were tilted at a perfect 45-degree angle, ensuring the greatest possible trajectory. The instant a hit became possible, the Ogre's targeting laser painted a spot at the base of the mushroom-shaped tower. The main battery fired; the tower quivered. The big gun spoke again and again, the Ogre ignoring the tiny enemies swarming about its treads. Then, as the range closed, the Ogre's surviving secondary joined in. Abruptly, the tower's hundred-meter bulk dissolved into shards of steel and concrete. The Ogre scanned for the reactor building just before it died in a hail of tac-nukes and bomb drones. The infantry had arrived, but it was a little late.

\*\*\*

Makharov surveyed the remains of the big Ogre and of the installation beyond. The Combine would probably be launching a test missile at them any time, to check their robots' handiwork. He thought of the flask in his pocket, forgotten since the interruption of his stroll. Only the barest trace of the day remained, and he considered taking a last walk on the tundra before the missile came in. Why not have a quiet drink with the lieutenant and wait for the end? He put that thought away in disgust. *Robots throw their lives away, and so do men*, he reflected. *But not*

*without purpose.* “Lieutenant! Order all units to regroup and rendezvous outside Iestagrad. We have an evacuation to organize, and not enough time.” Pocketing his flask, he climbed into the already-moving hovercraft.

## A BEGINNER’S GUIDE TO MAP-BASHING

In the ongoing conflict between Paneurope and the Combine, the real loser seems to be that 30-kilometer strip of land, located out there . . . somewhere. After you’ve fought over the *Ogre* and *G.E.V.* maps enough times to reduce every square inch to radioactive rubble you’ll no doubt start looking for new worlds (or at least counties) to conquer. Blank hex paper is fine, but an office copier and some highlighters can give you a new map while retaining some of the look of the originals.

The first step is to run off a copy of the original *G.E.V.* map; it is larger than the *Ogre* map and has more interesting terrain. An office copier will do it in two legal-size sheets; adjust the copy darkness until you have clear, black hexlines and numbers. Most terrain will turn to a featureless gray, except for roads, which stand out boldly. Close examination will let you distinguish between land and sea hexes – but you can hide this distinction in the next step if you like.

Now you color the map. The key to this is the use of “highlighters,” the transparent felt-tip pens that we all used in high school and college. These tint the map without obscuring the hexlines and numbers, and come in a variety of useful colors. Green gives you fields, green with a little blue makes forest, blue gives ocean, yellow provides desert, yellow plus pink will produce a good orange for craters. A regular black felt-tip can then be used, if necessary, to add roads, bridges, etc. To indicate a town, leave the hex uncolored (or partially so) to simulate the black-and-white effect of the towns on the original map.

For a specific example, here’s how to create the map for “Icepick.” Start with the *G.E.V.* map. After taping the two copied sections together, run a blue line from the edge of the swamp (2306) along the edge of the lake down to

the large river bridge in hex 2013. Go around the bridge (i.e., leave it white) to produce the pier of the story, which projects into the ocean. Continue the blue line down the west edge of the river to the point at which it meets the southern stream (1616) and follow the line of the stream to the west edge of the map. Everything south of this blue line is now colored totally blue, becoming the Arctic Ocean. Roads in the ocean, of course, are not usable!

Now re-color the two other streams in their original location, and create “swamp” in the line of hexes south and east of the southern stream (i.e., hexes 0108 to 1013) by stippling these hexes green and blue. Hexes 0913, 1013, 1113, 1114, and 1214 are also swamp. All roads remain the same. All other hexes are colored light green except the town hexes; thus, there is no forest on the new map, and no swamp except that which you just added. If you wish, you can add local names: the large town to the NE is Iestagrad, the two-hex town at the junction is Iestagrad Base, and the three-hex town to the NW is Station Andropov, the laser defense installation that the Ogres in “Icepick” are trying to take out. The small village just south of the swamp is Gorky.

Obviously, this is just one example. Other possibilities include turning all but the forest hexes blue to get a group of islands; coloring the clear hexes dark green and treating the forest as clear terrain; cross-hatching the forests to get a large urban area . . . whatever you like.

*Thanks go to Rickie Lattie of San Marcos, TX, whose cratered photocopies led to the original idea for map-bashing.*

## ICEPICK SCENARIO

After making the map (see “A Beginner’s Guide to Map-Bashing,” above), the defending player (White/Paneuropean) gets the following forces:

Three howitzers: one (Battery Nadia) within two hexes of the pier at 2013, one (Battery Olga) within two hexes of the point at 1616, and one (Battery Rudolf) anywhere on the board. These may be regular howitzer units, mobile howitzers, or any combination.



Nine GEVs: four (Group Lansky) set up anywhere in the blue ice/ocean area, four (Group Iestagrad) in the town hexes at 1408 and/or 1409, and one at 0708.

12 light tanks, set up in four stacks of three, anywhere south of the road connecting hexes 0104 and 2304.

20 strength points of infantry, as follows: Six *marine* squads anywhere in the blue area, one triple squad each at 1408 and 1508 (which, incidentally, is the base area for Groups Iestagrad and Lansky), and the rest stacked with or adjacent to any or all of the howitzers.

The Paneuropean installation (Station Andropov) is represented by three counters in the town hexes at 0304/0403/ 0404: One represents the reactor; one represents the laboratories and administrative offices; one represents the laser tower. The installation is protected by electronic and optical jamming; the Ogres cannot tell which unit represents which part of the complex until they come close. (The Ogre player does not know which is which when play begins – see Special Rules.)

The Combine player gets three Ogres. Icepick Leader is a standard Ogre Mark III; Icepick Two and Three are obsolete (but still dangerous) Mark II units, with characteristics as follows: one main battery (4/3; D4); two secondaries (3/2; D3); six AP (1/1; D1 ); and 30 tread units (starting speed of 3, reduced by 1 for each 10 tread units lost). The Ogres may set up to the south (anywhere within five hexes of the edge of the map); to the east (any hex on the east edge of the map, but not north of 2308), or both.



The Ogres may not set up stacked. The Ogre player moves first. Note that, until the Ogres leave the water, they travel at the standard underwater movement rate of one hex per turn, but may not be attacked except by HWZ and MHWZ fire (at half strength) and by marine battlesuits.

## SETUP SEQUENCE

1. The defending player sets up Batteries Olga and Nadia, GEV Group Iestagrad, and all the “regular” infantry.

2. The Ogre player studies the map and then *writes down* where he wants his units to enter. He does not show this to the defender yet.

3. The defending player sets up the rest of his units within the limitations above. A howitzer may go anywhere but swamp; mobile howitzers and other units may even set up in swamp.

4. The Ogre player puts his units on the map and makes his first move.

## VICTORY CONDITIONS

Ogre total victory: Destroy all three units of Station Andropov and get at least one Ogre back off the south edge of the map, or destroy all three units of the station and the town hexes at 1408 and 1508.

Ogre major victory: Destroy all three units of Station Andropov, or destroy the laser tower and one other unit and get at least one Ogre back off the south edge.

Ogre marginal victory: Destroy the laser tower.

Defender marginal victory: Preserve the laser tower.

Defender major victory: Preserve the laser tower and the reactor, or preserve the laser tower and eliminate all three Ogres.

Defender total victory: Preserve all three units of the station, or preserve the laser tower and the reactor while eliminating all three Ogres.

## SPECIAL RULES

**Detection:** The defending player does not find out which type (Mark II or III) an Ogre is until it comes on land or a marine infantry unit enters its hex at sea.

**Bridges:** The pier (hex 2013) and the long bridge over the swamp (0409) are both treated like the river bridge at 2013 on the original *G.E.V.* map; each has a defense of 8 against distance attacks. The pier is destroyed automatically by any attack from 1913 or 2013; the swamp bridge is destroyed automatically by any attack from 0408, 0409, or 0410. When either bridge is destroyed, any non-Ogre units on it are also destroyed. Any Ogre on the pier when it is destroyed is dropped into the ocean, and suffers as per Section 8.041 of *G.E.V.* Any Ogre on the swamp bridge when it is destroyed suffers those same effects, and is automatically stuck.

**Marine battlesuits:** The six infantry units that begin the game in the ocean are equipped with marine battlesuits. Marine squads may attack Ogres while the Ogres are underwater, provided they are in the same hex. Treat this



as a normal attack, *not* an overrun. Marine battlesuits move and defend, both on and under water, as though they were on land, and function normally on land. Ogre AP weapons are useless underwater, so the Ogre may not counterattack the marines while it is underwater. Counters are provided for the marine battlesuits.

**Ice:** The blue map hexes (ice in the story) are treated like water for all purposes. The ice is not thick enough to bear any vehicle except a GEV, and melts whenever combat occurs – so it is water, for all practical purposes.

**Station A:** The defending player puts the reactor, laser, and admin counters in hexes 0304, 0403, and 0405 – one per hex, in any combination, with the “Station A” side up. The Ogre player learns which hex holds the laser tower after the tower fires on the Ogre once; other station counters are turned over when an Ogre approaches within six hexes.

**The Laser Tower:** This is a super-heavy laser, designed to knock down incoming missiles. It pulses several times a minute.

For game purposes, the tower has two attacks per turn, each of strength 2, which can *not* be combined with each other or with any other attacks. The tower can attack *any hex on the map*, but cannot hurt an Ogre underwater.

The laser also has a chance of knocking down an Ogre missile in flight during the Ogre’s attack phase. When an Ogre missile is fired, the tower may attack it with one or both pulses; a roll of “6” will kill the missile. These attempts come off the laser’s attacks next turn; for instance, if it fired once against an Ogre missile, it would have only one attack on its next turn.

If the laser is reduced to 30 structural points (see *Building Damage*, below), it will not be able to fire for the rest of the game.

(Note that the Laser Tower rules were changed for *Shockwave*; they appear here as originally printed so you can see how they evolved. – SJ)

**Building Damage:** The “command posts” in *Ogre* and *G.E.V.* are relatively small buildings or trailers. Even those with a defense strength of D2 or D3 depend mostly on ECM and a few feet of earth for what defense they have. A “real” building, built of steel and concrete and sheathed in its own BPC armor, is much sturdier. On the other hand, it’s also a bigger target. Each building has a set number of “structure points”: 60 for the reactor building, 40 for the laser tower, 20 for the admin building. These can be reduced either by gunfire or by ramming. When a building’s structure points are reduced to 0, it is destroyed. (A special note: When the laser is down to 30 SP, it will not function for the rest of the game.)

AP weapons have no effect on large buildings. All other weapons automatically hit if fired at a building within range, doing twice their rated damage in normal attacks, or four times rated damage in overruns. Thus, a main battery, with an attack strength of 4, would do 8 SPs of damage in a normal attack, or 16 SPs in an overrun attack. Should a scenario call for infantry or armor units to overrun buildings, those weapons also have doubled effect.



Structure points can also be eliminated by ramming, if an Ogre or other unit overruns the building hex. An Ogre rams a building as though it were ramming a “larger” Ogre (see *Ogre*, Section 5.034). Thus, any Ogre loses five tread units each time it rams a building. The damage an Ogre or other unit does to a building is governed by its own size, as follows:

Mark VI: seven dice

Mark V, IV, Fencer: five dice

Mark III: three dice

Mark II or GEV: two dice

Mark I or Heavy Tank: one die

Infantry or other units: no dice

Note that in each case Ogres do one more die of damage against a building than they do when ramming other Ogres. A Heavy Tank, like a Mark I, has 15 tread units; it can ram a large building three times before ruining itself. A *G.E.V.* can only damage a building by ramming it at full speed – which, of course, destroys the *G.E.V.* as well. Other units cannot do significant damage to a “real” building by ramming it.

**Notes on overruns:** It costs an Ogre one movement point to make an overrun attack. Therefore, an Ogre with one MP can make one overrun in the hex it enters, or the hex it starts in. An Ogre with three MPs left, that started in the same hex with the target building, could make three overrun attacks (not four – the road does not matter). *Each* overrun attack may include two fire rounds against the target building and (if desired) one ram. Thus, if an Ogre with even one functional weapon gets into a hex with a building, that building is probably lost. Even if the Ogre has no weapons, it may grind the building to gravel.

## VARIANT SCENARIO

Eliminate Icepick Three from the scenario, leaving one Mark III and one Mark II. However, both these Ogres now have “self-destruct” capacity as per the *Ogre* rule-book (Section 8.05). A building in the same hex with a self-destructing Ogre is destroyed; one in an adjacent hex takes six dice of damage, and one two hexes away takes two dice of damage.

**M**ost *Ogre* fans enjoy experimenting with modifications of the standard armor units, and inventing brand-new ones. Unfortunately, the point-cost values of such new or modified units are often subject to debate. What is a Heavy Tank worth if you increase its attack strength by 2? Does reducing its movement value by one MP compensate? How can you tell? The values for the original *Ogre* and *G.E.V.* games were set by extensive playtesting . . . very extensive playtesting.

A number of gamers have speculated that there had to be a formula. I've always thought that there was, myself . . . but I never knew what it was!

Then Henry Cobb worked it out. His first version of this algorithm, back in 1984, not only worked for the original units . . . it gave excellent results for the new Light GEV unit, which Henry didn't know about when he presented the original article! This version of the Cobb algorithm is an even better fit.

# BACK TO THE DRAWING BOARD:

## DETERMINING UNIT COSTS IN OGRE/G.E.V.

by Henry Cobb

This algorithm gives a point cost value for any unit, defined in *Ogre* terms. All movement and combat abilities of the unit are taken into account. A numerical value, called "Movement Mode" (see below) is assigned to each unit on the basis of its ability to traverse different terrain types.

The mechanics of *Ogre* are very simple. First one player moves his units, fires each weapon once, and withdraws his GEVs. Then the other player follows the same steps. Because of this turn phasing, movement, especially second phase movement, acts a lot like range. As the old saying goes: do onto others, then split.

And range effects are very simple. Units fire at full effectiveness until their maximum range then offensive capability drops to zero. So if you can inflict damage and then withdraw outside the reach of the target's full first move plus his range, no retribution can be delivered during the reply turn.

But the ability to inflict damage, once the target is within range, is a simple test of attack strength divided by the defense strength and chopped at various ratios.

So my formula values a unit as the sum of the area of two rectangles. The first rectangle has a height of the unit's attack strength and a width of its range plus its first move (the advance reach). The second rectangle has a height of twice the defense strength (because the 1-1 attack works out to about half a kill effect per shot) and a width of the weapon range plus the second movement phase distance (the withdraw reach).



There are adjustments to this basic formula, because different units move and defend differently in the various terrain types.

The complete formula becomes:

$$\text{Cost} = \text{Atk} \times \text{OS} \times \text{AP} \times (\text{Rng} + (\text{OR} + (\text{Move1} \times \text{MM})) + 2.0 \times \text{Def} \times \text{DM} \times ((\text{Rng} \times \text{OS}) + (\text{Move2} \times \text{MM})))$$

Where the terms are

**Atk** – Attack Strength

**OS** – 1.0, except for one-shot weapons, where it's 0.333

**AP** – 1.0, except for antipersonnel only weapons, where it's 0.333

**Rng** – Range, in *Ogre Miniatures* inches or *G.E.V.* half-hexes.

**OR** – 0.0, except for weapons that are doubled in overruns, which get 1.0

**Move1** – First movement phase distance, in *Ogre Miniatures* inches or *G.E.V.* half-hexes.

**Def** – Defense strength

**DM** – Defense Multiplier

1.0 for normal units

1.5 for Militia (bonus for terrain effects, reduced by D CRT effects)

2.54 for Infantry (bonus for terrain effects and less effect from D CRT effects on platoons)

3.05 for Marine Infantry (Even better terrain effects than regular infantry),

1.8 for Ogres (1.5 for no D CRT results, plus a bonus for the added defense underwater, but not as much as Marines.)

### MM – Movement Mode (based on *Ogre Miniatures*)

Militia (MIL): 0.9

Infantry (INF): 1.5

Marine Infantry (MAR): 1.7

GEVs (GEV): 1.2

Heavy Tanks (HVV): 1.33

Superheavy Tanks (OGR): 1.4

Standard Tracked Vehicles (TNK): 1.0

If the unit has more than a single attack, add additional attack terms, with all the attacks after the biggest multiplied by 1.1 to account for the benefit of splitting and staging attacks.

So for a Heavy Tank, the calculation is:

$$\begin{aligned} &4 \times 1.0 \times 1.0 \times (4 + (0.0 + (6 \times 4/3))) \\ &+ 2.0 \times 3 \times 1.0 \times ((4 \times 1.0) + (0.0 \times 4/3)) \\ &= 48 + 24 = 72 \end{aligned}$$

Divided by 12, this gives 6 VPs.

And for a LGEV the calculation is:

$$\begin{aligned} &1 \times 1.0 \times 1.0 \times (4 + (0.0 + (8 \times 1.2))) \\ &+ 2.0 \times 1 \times 1.0 \times ((4 \times 1.0) + (6 \times 1.2)) \\ &= 13.6 + 22.4 = 36.0 \end{aligned}$$

Divided by 12, this gives 3 VPs.

Notice that the LGEV, with a third the defense strength, has almost the same “defense value” as the Heavy Tank because of its ability to withdraw after firing, but its “attack value” is much less.

The calculation for a three-squad platoon of standard infantry is:

$$\begin{aligned} &1 \times 1.0 \times 1.0 \times (2 + (1.0 + (4 \times 1.5))) \\ &+ 2 \times 1.1 \times 1 \times 1.0 \times 1.0 \times (2 + (1.0 + (4 \times 1.5))) \\ &+ 2.0 \times 3 \times 2.54 \times ((2 \times 1.0) + (0.0 \times 1.5)) \\ &= +9 + 2 \times 9.9 + 30.48 = 59.28 \end{aligned}$$

Divided by 12, this gives 5 VPs.

If you're not getting that value out of your infantry, they're not standing in the right terrain. This is still 20% below their book value, but this is about right if you toss in an adjustment for being able to hitchhike tanks and if you include my Forward Observers rule (below).

The (D5, AP equipped) Superheavy Tank is

$$\begin{aligned} &3 \times 1.0 \times 1.0 \times (6 + (0.0 + (6 \times 1.4))) \\ &+ 1.1 \times 3 \times 1.0 \times 1.0 \times (6 + (0.0 + (6 \times 1.4))) \\ &+ 2 \times 1.1 \times 1 \times 1.0 \times 0.333 \times (2 + (0.0 + (6 \times 1.4))) \\ &+ 2.0 \times 5 \times 1.0 \times ((6 \times 1.0) + (0.0 \times 1.4)) \\ &= 43.2 + 47.52 + 7.63 + 60 = 141.55 \end{aligned}$$

Divided by 12, this gives 11.8 VPs.

The calculation for a Missile Tank goes:

$$\begin{aligned} &3 \times 1.0 \times 1.0 \times (8 + (0.0 + (4 \times 1.0))) \\ &+ 2.0 \times 2 \times 1.0 \times ((8 \times 1.0) + (0.0 \times 1.0)) \\ &= 36 + 36 = 72. \end{aligned}$$

Divided by 12, this gives 6 VPs.

And a standard Howitzer is:

$$\begin{aligned} &6 \times 1.0 \times 1.0 \times (16 + (0.0 + (0 \times 1.0))) \\ &+ 2.0 \times 1 \times 1.0 \times ((16 \times 1.0) + (0.0 \times 1.0)) \\ &= 96 + 32 = 128 \end{aligned}$$

Divided by 12, this gives 10.67 VPs.

While the Mobile Howitzer is:

$$\begin{aligned} &6 \times 1.0 \times 1.0 \times (12 + (0.0 + (2 \times 1.0))) \\ &+ 2.0 \times 2 \times 1.0 \times ((12 \times 1.0) + (0.0 \times 1.0)) \\ &= 84 + 48 = 132. \end{aligned}$$

Divided by 12, this gives 11 VPs.

If you adopt the Forward Observer rule, add to the total cost of any heavy missile unit half the boosted range (in inches) as a percentage.

So the MHWZ gets a price tag boost of 18 inches / 2 = 9 percent for a total cost of 11.99 VPs, and the standard Howitzer gets a increase of 24 inches / 2 = 12%, for a total price of 11.95 VPs.

## FORWARD OBSERVERS

In the 20th century, the grunts didn't fly around or carry very big guns, but they had radios and laser directors, and if anything would just stand still in front of them for long enough, they could bring down all the power of the back line on it.

In the 21st century, everything is jammed, and the big guns don't reach as far, but they can go a bit further, with a little help from their friends to paint targets and suppress defenses so the missiles don't have to waste time and fuel on evasive maneuvers or scouting around.

With this optional rule, heavy missile weapons (defined below), may fire at a 50% bonus to their effective range, when they combine fire with normal infantry fire, up to the normal 2" (one hex) infantry range.

Additional units may be designated as Forward Observers in the future, but they must have the ability to designate and fire from multiple rapidly shifting positions at close range or they wouldn't be able to effectively tie down point defenses. (Certain drone types may qualify.)

Heavy Weapons Squads count as heavy missile weapons when launching missiles, and forward observers when firing normal infantry weapons. (So a Heavy Weapons squad could fire at a target 12" away, if it combined its fire with an Infantry squad 2" from that target.)



Announce both components of the attack before measuring either distance. If the missile unit is not within the 50% range boost, then it fires at the limit of its boosted range and the infantry fires alone. If the infantry is not within the 2-inch range, the missile unit loses its range bonus. Its shot falls short, hopefully not on the myopic infantry!

Units eligible to get this boosted range are Ogre missiles, Howitzers (all types), Field Artillery and Heavy Weapon Squads' missiles (which are not all that heavy, but are specially designed for infantry support).

## LASERS

Lasers are a special case not addressed by this algorithm. They are very large units, an integrated part of the national air and space defense. and any scenario with a laser on the board takes place within its sensor array. This, even more than energy requirements prevented *Ogre*-world development of mobile lasers other than aboard warships, and the naval lasers depended on data links from entire fleets for accurate targeting.

## DESIGNING NEW UNITS

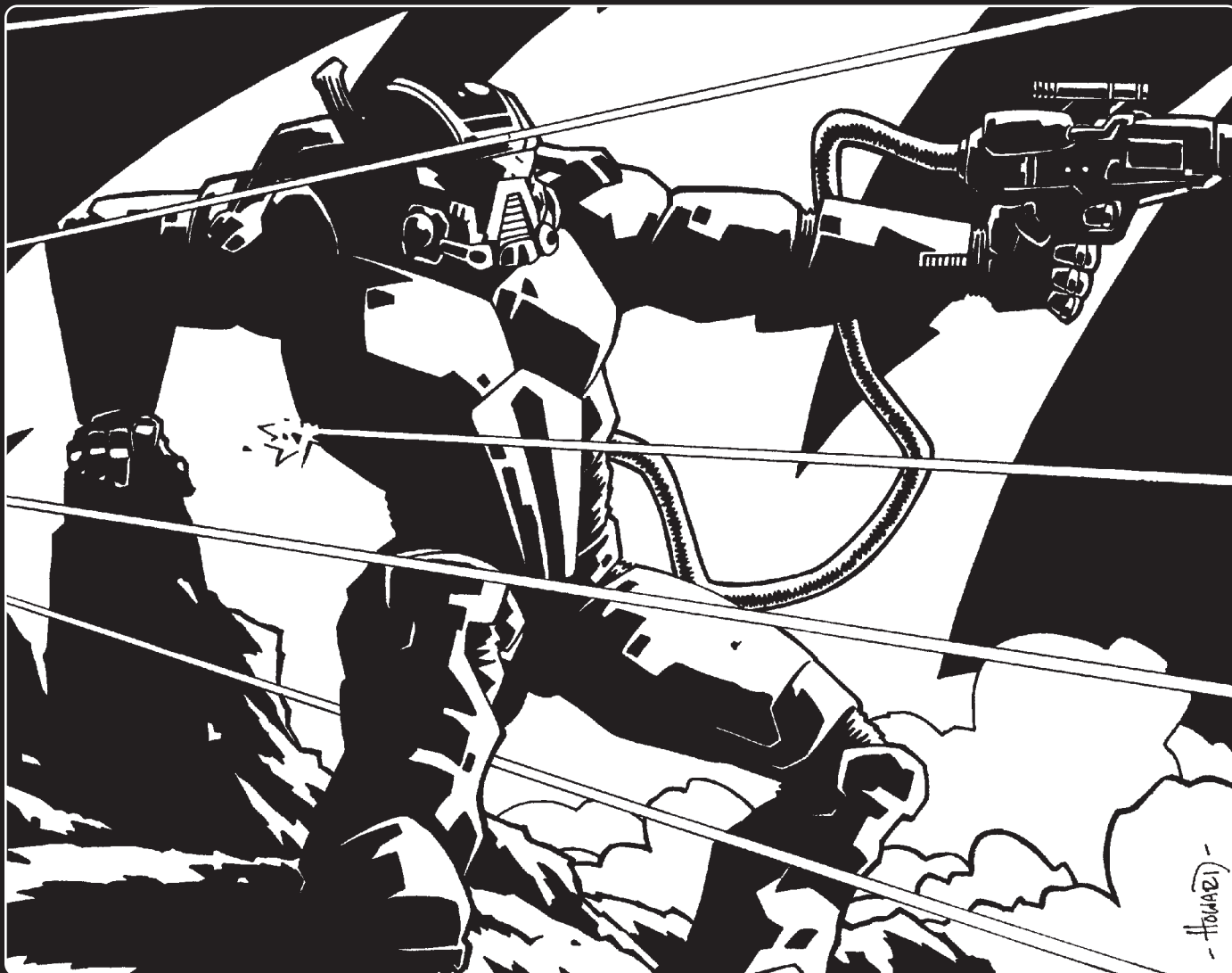
The true value of this algorithm is that it can be used to determine fair victory-point values for new units. For instance, suppose we want to design a Mobile Howitzer-type unit that costs no more than a standard armor unit. Looking at the MHWZ calculations above, we see that it will be necessary to halve the attack strength *and* the defense in order to halve its value:

### Light Mobile Howitzer (LMHWZ)

|           |                    |            |
|-----------|--------------------|------------|
| Attack: 3 | Range: 12"         | Defense: 1 |
| Move: 2"  | Movement Mode: TNK |            |
| Size: 3   | Points: 6          |            |

This scaled-down version of the Mobile Howitzer was designed specifically to hold off raiding GEVs. Due to its weak armor and limited point defense, it tended to spend most of its time in revetments, surrounded by a ring of infantry or militia, but it could go on the road if necessary.

The price tag is:  $3 \times (12 + 2) + 2 \times 1 \times 12 = 66 / 12 = 5.5$  VPs, well within our range for a standard armor unit. If we allow a bonus of 6 percent for observer boost, that becomes 5.83 VPs.



# SYSTEM PARAMETERS AND LIMITATIONS

by Steve Jackson

The Cobb algorithm cannot allow for all possible “special abilities” of units. For instance, a unit that had the ability to ignore a “D” result could not accurately be valued by this algorithm.

Likewise, it’s possible to plug in numbers that just make no sense in terms of the game background. The Cobb algorithm was designed to operate on vehicles having “reasonable” ranges of characteristics. It does not take into account that some numbers are flatly impossible; that some possible numbers would still be much more expensive than the algorithm assumes; and that some combinations are unlikely or impossible. The Cobb algorithm is like an equation with an imaginary root. It predicts a number of solutions – but common sense keeps you from trying to use the impossible ones. But what’s impossible, in terms of the design limitations of the *Ogre* world’s technology. And, while I’ve published any number of hints, I have never really defined those limitations. So this is an excellent time to do so. Keep in mind that I am talking about single units here, and not buildings or Ogre weapons.

## ATTACK STRENGTH

Anything less than 1 would represent a single infantryman, or a popgun on a truck. (A strength of 0, of course, represents a noncombat unit.) The highest single-unit strength seen so far, except for Ogres, is 6 (SHVY and MHWZ). Greater strengths are possible, of course, by adding more guns . . . but unless they are independent targets, as they are on an Ogre, you reach a point of diminishing returns because one hit knocks out all that firepower! I would guess that 6 is the practical limit for single-unit attack strength, with 8 the absolute top.

## DEFENSE STRENGTH

Remember that, because of the way the CRT works, a defense of 3 (for instance) is far better than a 2, and a 2 is far better than a 1. We might be looking at a doubled armor thickness each time. (And defense strength also has to do with mobility. A HWZ really has more armor and point defense than a MHWZ . . . but the HWZ is a sitting duck, and its defense strength reflects that.) I suspect that a defense strength of 5 (SHVY) is close to the maximum practical for any single unit. I might believe a 6. I won’t

believe more until they come up with a better grade of BPC and smarter point defenses – which are discussed in a bit more detail in *Ogre Miniatures*.

## RANGE

The limiting factor on ranges in *Ogre* is not ballistics. It’s targeting. To make the game more interesting, one of my basic assumptions was that “spoofing” technology will advance much faster than targeting. An Ogre’s guns could throw a projectile for many miles – but could not hit anything smaller than a city at that range, and then only with the benefit of inertial tracking. The Cruise Missile, Ogre missiles, and HWZ projectiles are large enough to be “smart,” and that is what gives them some extra range. So . . . at these prices, I don’t want to accept any range longer than 10 for anything fired from an individual unit. And to qualify for a range longer than 4, it has to be a heavy

projectile – minimum of 3 attack strength, and probably more. (If the Heavy Tank or the Ogre main battery, with attack strength 4, could fire smarter weapons, they would. I assume that not even an Ogre can carry an unlimited supply of brilliant rounds. Although some of our ideas for other cybertanks *do* involve “main batteries” in the howitzer class.)

## MOVEMENT

Here’s where we could get really silly. Cross-country speeds of 4 ( $4/3$  for GEV units) are the highest seen in the game. These are intended to represent good old military overspecifications. Speed is vital. If they could make things go any faster at a reasonable cost (or even an unreasonable cost) they would! The only way they’re going to get anything faster is to strip all the weapons and armor off, or build a road for it, or take to the air (and aircraft get shot down). So much for the idea of speeding up GEVs. And even a  $4/3$  speed would be much more expensive with a heavy load. A heavily armed and armored “Super GEV” would be possible – but it would be state-of-the-art engineering, and would have to cost a lot more than the algorithm might lead you to believe.

But this system will still allow creation and evaluation of a wide variety of new units – either standard or experimental – for your *Ogre* game. Just be sure to stay out from



**A**nother great strategy article from Phil Rennert, published right after the original release of *Shockwave*. I had some parenthetical comments when this was first released, and they're still in there. So are some new ones; the new ones are annotated "Y2K." If you're reading this as

long after I wrote it as has passed since the game was first created, you may have to do a bit of homework to find out what "Y2K" means. Welcome to history . . . it just keeps piling up.

# RIDING THE SHOCKWAVE: ANALYSIS AND STRATEGY

By Philip Rennert

Steve Jackson's long-awaited expansion set for *Ogre/G.E.V.* has been published. It's called *Shockwave*, and it includes a bunch of new units and scenarios (also a new map which fits on any side of the *G.E.V.* map). The new units introduced are the cruise missile, which comes on a missile crawler, the laser and laser tower, the light GEV (LGEV), the GEV personnel carrier (GEV-PC), the super-heavy tank, and marine infantry. There are also trucks and hovertrucks, but these are unarmed and tend to be targets only. I'd like to discuss how these new units interact with each other and the older units, and offer some strategy suggestions for the new scenarios. *(And I'll be making a few comments on Phil's ideas here and there – Steve Jackson.)*

## NEW UNITS

The first and most devastating of the new units is the cruise missile. They carry fairly large nukes: They're what made the craters on the Ogre map. When a cruise missile goes off, everything in its hex is destroyed, and a shockwave is generated which attacks units up to 5 hexes away, depending on unit type.

It's easy to see that cruise missiles are death on everything, and especially on hovercraft. However, there is a defense: You can shoot down the cruise missile before it gets to you. When a cruise missile is launched, everything stops while the missile is moved, a hex at a time. If the missile passes within range of defending units, each unit gets one free shot at it. The odds aren't very good, but if the missile

has traveled far, it's easier to track and hit. If a cruise missile is hit, it's destroyed, but it has a 1/6 chance of exploding in the hex where it was shot down.

Some things can be seen from this:

1) Cruise missiles can be used in two ways: Fly into the target's hex and obliterate him for sure (if you make it), or detonate just outside his range and kill him with the shockwave. The first method will appeal to gamblers: The odds will often be that your expensive cruise missile will be shot down, but if you make it, you can wreak great havoc. The second method is more conservative: There's no risk, but the damage will be less against anything except hovercraft; GEVs are exceptionally susceptible to destruction by shockwave. It's clear that nail-biting decisions will be made about whether to detonate now or go for one more hex. Cruise missiles introduce a not entirely welcome element of "the whole game on one big roll" (actually a lot of low-odds rolls) into *Ogre/G.E.V.*, which has remained relatively free of this until now.



Winchell Chung's original sketches for Japanese (Nihon) Ogres, from 1987.



2) The distance a cruise missile flies is extremely important. Infantry, for instance, is twice as likely to shoot down a cruise missile which has flown 11 hexes as one which has flown 10. A laser tower will destroy 72% of off-board cruise missiles the instant they enter the map. If you plan to attack with the shockwave, it doesn't matter, but if you're going to give anyone a shot at your expensive cruise missile, you must make every effort to launch it from within 10 hexes of the target.

3) Infantry has found a new purpose in life: shooting down cruise missiles. For the price, nothing is as good at it as infantry. Every big, expensive unit needs an infantry screen around it to help protect it from missiles.

4) For reference purposes, to have a 50% chance of stopping a cruise missile you need:

- 8 squads of infantry or large armor units
- A laser and 4 INF
- If the missile has gone more than 10 hexes, 3 INF, or a laser and 1 INF.

An intact Mark III Ogre has a 79% chance of stopping a close-range cruise missile; this drops to 60% if the Ogre's missiles have been fired. For a Mark V, these figures are 97% and 77%. To turn this around, a close-range cruise missile has a 40% chance of destroying an otherwise intact missile-less Mark III Ogre (23% for a Mark V) if no other units are around to help the Ogre. A few squads of infantry or some nearby armor can be a big help here.

5) The shockwave/range ratings (i.e., how strong an attack a cruise missile can make without coming into range of the unit) of various units:

- All GEVs 4-1
- Light Tank 2-1
- Infantry 2-1
- Heavy Tank 1-1

Other units can't be shockwaved from outside their range.

Cruise missiles are expensive. For the price of three armor units, you get a missile crawler (defense 2, movement 1) carrying a single cruise missile. When the missile is fired, what remains is an unarmed crawler (movement goes up to 2) which you then try to evacuate off your board edge, since the enemy counts one armor unit (6 victory points) if he destroys it. This strongly implies that the value of a cruise missile is two armor units (12 victory points). I'd like to suggest a rule clarification: It should be explicitly stated that whenever you launch a cruise missile, your opponent gets 12 victory points. (*Yes – SJ*). Therefore you must be sure to get your money's worth from a cruise missile.

To shoot down cruise missiles, we have lasers and laser towers. With the introduction of lasers, *Ogre/G.E.V.* has lost its innocence as far as lines of sight go: Lasers are straight-line weapons with infinite range (well, 30 hexes) which are blocked by any raised terrain (towns, woods,

swamps, rubble). Since the *Shockwave* map is somewhat more obstructed than the *G.E.V.* map (it resembles the north half of the *G.E.V.* map), lasers (which are immobile) must be placed with great care to get good use out of them. Laser towers are tall enough to shoot over raised terrain, so they avoid the line-of-sight problem, but neither lasers nor laser towers can shoot at a unit in raised terrain (exception: laser towers can shoot at cruise missiles in raised terrain). Lasers and laser towers don't have defense strengths; they are buildings. Rules for shooting up buildings are introduced in *Shockwave*.

The main purpose of lasers and laser towers is to shoot down cruise missiles, which they do well (in fact, they can intercept Ogre missiles on a 9 or more on two dice). (Rules question: Can a laser intercept an

Ogre missile fired at a cruise missile?) (*Yes. – SJ*) However, they can also shoot at other units, with an attack strength of 2; this can be quite effective against expensive, poorly-armored units (Missile Crawler, HWZ, MHWZ).

The light GEV is effectively half a GEV, at half the price. This can be useful: An LGEV is as good at shooting cruise missiles or bridges as a GEV, and relatively more efficient at shooting up town hexes.

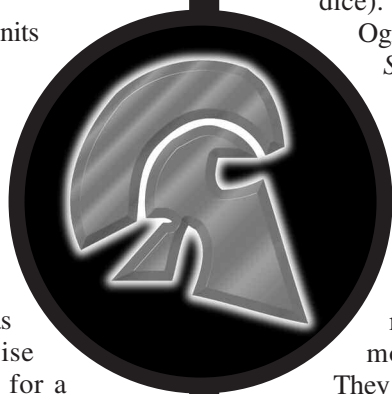
They can be a cheaper way of getting a GEV's job done.

The GEV personnel carrier gives infantry another new role: mounted attack. A GEV-PC carrying 3 squads can advance 3 hexes, attack an adjacent unit with a strength of 4 (3 INF plus its own 1), then either run away 2 hexes with the infantry, or dump the infantry out to receive the return fire and run away by itself. The speed of the GEV-PC makes it much easier to get infantry into the action.

This brings up an apparent flaw with *G.E.V.* rule 5.11 about infantry riding tanks (and GEV-PCs). This rule describes how to shoot at infantry mounted on a carrier unit, but 5.111 says that infantry can freely mount at the beginning of a turn and dismount at the end: That way (unless someone mistakenly takes mounted infantry into an overrun), the other side never gets a chance to shoot at infantry while mounted! The infantry spends its own turn mounted and the other side's turn (when it gets shot at) dismounted, getting the benefit of riding without the cost.

Therefore, I'd like to propose a rule change (to be *G.E.V.* rule 5.112): If a player can fire into a hex containing enemy infantry and carrier units, he may ask if the infantry plans to ride in the coming turn. If the defender says yes, he must mount up the infantry immediately and take fire while mounted. If he says no, that infantry cannot ride in the coming turn. (*Clunky, but reasonable – and yes, it does close the loophole. – SJ*)

It's clear that taking mounted infantry into an overrun attack is usually a mistake, since one die roll is applied to the carrier and each squad, and can easily destroy them all. However, I'd like to propose an optional rule about this:



**Optional G.E.V. rule 5.113: Panzerblitz (or hoverblitz) attacks.** Infantry which rides a carrier unit into an overrun attack may choose to dismount after entering the overrun hex but before taking fire. (Since the approximate enemy position is known, this represents dropping off and fanning out just before reaching it.) In this case, each squad and the carrier are separate targets, as though the infantry had entered the hex unmounted. After the combat, surviving infantry may not remount or continue to move, but the carrier (if it survives) may continue to move if it has movement remaining.

This optional rule definitely increases the effectiveness of infantry: With it, three squads on a GEV-PC are odds-on to kill any armor unit but a Superheavy in an overrun, and they can make such an attack up to 5 hexes away!

The superheavy tank has two guns, each with attack 3, which can fire on different targets. One hit still destroys the whole tank. According to my calculations, a pair of Heavies dueling a Superheavy will win 60% of the time even if the Superheavy fires first. (How do you figure that? My calculations don't agree with yours. I'll address the question in a future designer's article. – SJ) (*Y2K SJ note: We did eventually decide the Superheavy was a bit underpowered, so we increased its defense and gave it a couple of AP guns.*) Therefore it's hard to imagine when I'd rather have a Superheavy than two HVYs. Superheavies do have the advantage of greater attack range; they can attack from 6 hexes away, and they can't be shockwaved from outside their range. However, I doubt this outweighs the disadvantage of being a single expensive target.

Finally, marine infantry are just like regular infantry, except they treat water hexes as clear terrain. Their cost is high (trade 2 regular infantry squads for each marine squad), but they can be useful in certain applications.

I'd like to propose a rule which seems to follow but wasn't stated:

**Shockwave rule 3.0161:** Marines and INF stacked together can be grouped together in groups of up to three squads for defensive purposes. (Example: two marines and an INF in a town hex could be treated by the defender as a single defense strength of 9.) If the attacker rolls a "D" against such a group, roll again to see which squad died (in this example, one of the marines dies on a 14 and the INF on 5 or 6). (*Yes. – SJ*)

## UNIT ANALYSIS

Now I'd like to summarize the good and bad points of these units, make some unit choice recommendations, and suggest how to use, and oppose, these units. What I have in mind here is a "Ceasefire Collapse"-type meeting engagement, but this also applies to other situations.

## CRUISE MISSILE (MISSILE CRAWLER)

*Good points:* destructiveness!

*Bad points:* cost, vulnerability.

*Recommendations:* This is tricky: If the other guy doesn't have a laser tower, or if his force is mostly hovercraft, I'd recommend taking some; otherwise, not.

*What to do with yours:* If he doesn't have a laser tower, keep at least one in reserve. This is a case where the threat can be more powerful than the execution. The existence of a cruise missile will force him to keep his units screened by infantry, avoid stacking, and generally use his force in a less than optimum fashion. If he has missile crawlers, it may be worth taking his out with yours if you can: You'll probably get some other units into the bargain. If he has a group of hovercraft, attack them via shockwave; otherwise weigh the odds in deciding whether to risk a direct attack or attack with the shockwave. If you plan to attack directly, be sure to do it from 10 hexes or less away. Keep your crawlers well screened by infantry and armor if the other side has cruise missiles.

If he has a laser tower, launch your missiles right away unless you can get your crawlers into protected terrain immediately. The risk of the laser tower killing your crawlers is too great. Since your crawlers will never survive to reach close range, attack by shockwave when you see a good chance (hovercraft are the best targets). Remember, your missiles can be shot down right after launch: Don't fly them over your troops if possible (I've seen someone fly a cruise missile over his Mark V Ogre, have it shot down in that hex, and roll a 6 . . .). Remember to evacuate your crawlers quickly after firing.

If you have off-board cruise missiles, attack by shockwave only (the chance of getting shot down is too great).

*What to do about the other guy's:* Clump your units in a tight defensive formation (avoid stacking), well screened by infantry. A line of INF, backed by a line of HVYs, backed by a line of MSLs, makes a good missile defense. Spread out your big targets (crawlers, HWZs & MHWZs, SUPERHVY); keep your Ogres protected by infantry. Try sending some hovercraft after his crawlers, but keep them spread out. It may be possible to take out his crawlers with cruise missiles. If his units get close, it can be advantageous to rush and intermingle your units: Shockwaves don't respect nationality.

## LASER, LASER TOWER

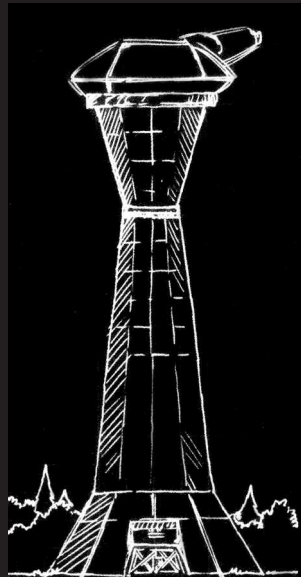
*Good points:* range, effectiveness against missiles.

*Bad points:* blockage by terrain, immobility.

*Recommendations:* If you have a choice (you do, in some scenarios), take a laser tower rather than two or three lasers: The ability to shoot over terrain is worth it.

*What to do with yours:* The best possible target is a missile crawler, then come HWZs and MHWZs; shoot them if you can. Keep your lasers screened by infantry if the other side has cruise missiles. Wait until the last minute to shoot his cruise missiles (bonuses to the roll) unless you have a golden opportunity to shoot the missile down over his own troops and you feel lucky. If none of the above happen, just keep taking your two-attack-factor shots.

*What to do about the other guy's:* If possible, blast them with cruise missiles. Otherwise, an advance with a bunch of armor units will eventually get to them. Keep your units in protective terrain. If they're lasers (not towers), just stay out of their line of sight. A rear area raid by a bunch of hovercraft can take out a laser tower, but expect to lose maybe one GEV per turn to the tower's fire. If you think you can get his lasers with armor units, hold back your cruise missiles until you do (they're more likely to reach their targets when the lasers are gone). Remember, laser fire doesn't spill over; if only lasers can reach you, you can stack units.



70 feet

**Final version of  
Laser Tower.  
Design by Steve  
Jackson; drawing  
by Thomas O.  
Miller.**

## LIGHT GEV

*Good points:* cost, speed.

*Bad points:* attack, defense strength, sensitivity to terrain.

*Recommendations:* If you're going to take GEVs, trade in one or two for LGEVs.

*What to do with yours:* Keep them on the fringes of the battle or use them to raid the enemy's rear. They're good for destroying bridges and towns, and for anti-missile screens. They can pick away at the infantry screens around the enemy's big targets, and not be worth his while to chase. If well handled, they can tie down more than their cost's worth of enemy units.

*What to do about the other guy's:* Light tanks are probably the best (cheapest) units for keeping them at bay. A LT will usually beat an LGEV in a duel, even if the LGEV fires first. In general, don't fire at an LGEV if there's a better target around.

## GEV PERSONNEL CARRIER

*Good points:* carrying capacity, speed.

*Bad points:* attack, defense strength, sensitivity to terrain.

*Recommendations:* Choose a few – they're a good way to get your infantry into the fight.

*What to do with yours:* Their job is to drop infantry in dangerous places and get away. One problem is that the hexes infantry likes (towns, woods) aren't hexes GEVs can get back out of: Drop in town /road or woods/road hexes if possible. Mounted attack can be quite effective, and you can always dismount afterward if it doesn't work. Keep the GEV-PCs nearby to pick up survivors after the combat. Be careful with GEV-PCs while loaded: They make big targets. If their infantry is lost, use them as slow LGEVs.

*What to do about the other guy's:* Shoot them whenever you can: They count for 12 victory points if you kill them and their loads. Cruise missiles are great against them, as against any hovercraft. Their mounted attack range is only 4 (move 3 + infantry range 1), so all units but infantry can usually stay away from them or get the first shot in.

## SUPERHEAVY TANK

*Good points:* attack strength, two guns, defense strength

*Bad points:* cost.

*Recommendations:* Don't choose any; take two HVYs instead. (Y2K SJ note: Wonder how he'd feel about the Superheavy now that it has the extra defense and the AP guns?)

*What to do with yours:* They're simultaneously big, powerful armor units and expensive targets: It's hard to both send them into the thick of things and be careful with them. Try to get off the first shot(s) with them. If possible, send them against missile tanks (which attack at only 1-2) or maybe HWZs (which attack at 1-1). They can shoot at HVYs from behind an infantry line two hexes in front of them. They belong in the forefront of your armor line, though they won't last very long.

*What to do about the other guy's:* Shoot them first, ahead of all other armor units; kill two guns with one X. A HVY's 4 attack factor is just right for killing them (1-1 attack), or use a pair of GEVs or LTs. If you have twice their number of HVYs, rush them: You can give them the first shot and still usually win.

## MARINE INFANTRY

*Good points:* They work in water.

*Bad points:* cost.

*Recommendations:* Take a few if an infantry screen around a big unit needs to include a water hex.

*What to do with yours:* Use them for screening in water hexes. In the *G.E.V.* "Raid" scenario, for example, I like to put a HWZ in the city hex that sticks out into the lake (2113). To keep the GEVs off, I need a screen two hexes away; a squad of marines can cover hex 1914 more cheaply than a GEV. A couple of squads in city hex 1915 can make the GEVs keep their distance even on the other



side of the river. However, infantry is supposed to be cheap and expendable: Expensive infantry draws too many shots and dies too quickly. If your marines survive their water screening duty, keep them back out of the battle (and in a town hex) if you can.

*What to do about the other guy's:* Shoot them first, ahead of other infantry: They count 4 victory points per squad. Remember that they cross water hexes with only one movement point when you're counting to see what can get you. If there are no marine reinforcements nearby, it may be possible to shoot the marines on the water hex and go through the hole in the screen next turn. If there are other marines around, shoot them too, then do the same thing.

## SCENARIO STRATEGY

*Shockwave* introduces a number of new scenarios; I'd like to make some strategy suggestions for them. I assume here that the optional rules for destruction of towns, bridges, etc. are in effect.

### "THE DAY BEFORE"

This is *Ogre* with cruise missiles. On the *Ogre* map, the defense gets 25 armor units, 40 infantry, and a laser tower; the attacker gets a Mark V Ogre and 20 off-board cruise missiles (of which only about 6 should make it past the first hex).

The defense should use all those extra infantry to form anti-missile lines across the board. Put the CP and the laser tower back in the corner, put a couple of HWZs 5 hexes in front of it, then put a line of single INF squads across the board 4 hexes in front of the HWZs, and another one 6 hexes in front. There should be enough left for a final line among the HWZs 5 hexes from the CP; a couple of pairs of LTs spaced 5 hexes apart in front of all that makes a cheap first line. This will pretty well keep the cruise missiles off

the CP: The attacker should run out of missiles well before he can chew through all that. The rest of the armor should be a mix of HVYs and MSLs, to stop the Ogre; as the attacker uses up his cruise missiles, line infantry can be freed to go die under the Ogre. The anti-Ogre armor line should mix HVYs and MSLs: The greater range of the MSLs makes it harder to attack by shockwave.

Faced with this, the attacker shouldn't waste missiles trying to get through to the CP, but should try to shockwave the armor facing the Ogre. Plan your move carefully, or you may end up with the Ogre right next to where you'd like to drop a missile. Ogre missiles can take out a couple of defending MSLs to clear a path for the cruise missiles (remember, though, that a couple of the Ogre missiles will probably be shot down by the laser tower). Fire the cruise missiles gradually: This keeps the infantry occupied in missile defense, and one missile per turn keeps the laser tower from shooting at the Ogre.

This is a good, tense, fairly balanced scenario; a lot will depend on how lucky the attacker gets with his missiles.

### "RECON IN FORCE"

"Recon in Force" is an expanded version of the *G.E.V.* "Raid" scenario. The *Shockwave* map is north of the *G.E.V.* map, and it contains the targets (everything on the *G.E.V.* map is already destroyed); in addition to towns, etc., there are 20 trucks and hovertrucks which need to make wake-up rolls before they can run. Twenty GEVs (the attacker can trade some for pairs of LGEVs) and 10 GEV-PCs full of infantry come in on the south edge of the *G.E.V.* map. The defender gets 8 armor units and 15 infantry on the *G.E.V.* map and 4 and 20 infantry on the *Shockwave* map, plus the usual *G.E.V.* "Raid" reinforcements (entering on the *Shockwave* map) starting on turn 4. The defender should take the maximum possible number



of Missile Crawlers, 3 (for the rest, LTs or GEV-PCs for his infantry). The threat of cruise missiles will keep the GEVs from stacking, spread them out, and slow them down, and the missiles themselves when they come will wipe out most of the attacking force. The big confrontation, which will probably occur in the approaches to the big city on the *Shockwave* map, may well involve only a handful of units on each side: ragtag reinforcements vs. what's left of the GEVs.

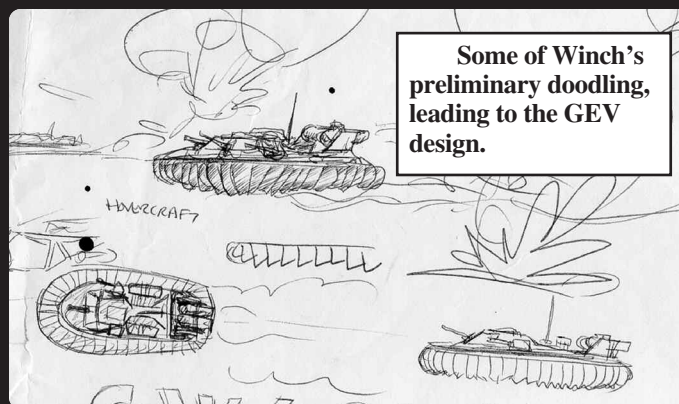
An interesting scenario, and very bloody: a good example of what cruise missiles can do to hovercraft.

## “CASEY JONESKI”

This is a new train scenario. The *Shockwave* map is east of the *G.E.V.* map: Casey's train must cross the *G.E.V.* map from west to east, then turn south on the *Shockwave* map and reach the terminal in city S-0413 (an extension to the east of the big city on the *G.E.V.* map). The defense gets 14 armor units and 20 infantry, plus 5 lasers or 2 lasers and a laser tower (I prefer the tower); the attackers, with 15 armor, enter the south edge of the *G.E.V.* map. The defense wins if the train reaches S-0413 and survives; the attackers win if they kill the train and exit 15 strength points; otherwise (the most likely result) it's a draw.

The defense should set up a strong force, mostly HVYs, in the big city, with infantry in the woods to the south (on the *Shockwave* map). If the attackers choose 15 non-missile units and attack the city directly, they'll get creamed. If they choose 15 GEVs and try to flank the city to the east or west, they won't make it: HVYs with a road and a shorter distance to travel can stay between them and S-0413 (the defense should put I INF on 1508 and S-1615 to destroy the roads in 1508, 1408, S-1615, and S-1515). They can't catch the train if it moves at full speed, without getting within range of too many defenders.

That leaves choosing mostly Missile Crawlers, firing them all on the first turn before the tower gets them, and turning the game into an uninteresting crapshoot. If the cruise missiles can destroy even one hex of track, the train can't reach S-0413 and the game becomes a draw. (The best place to destroy railroad track is in town/RR hexes: Town hexes can be destroyed from as far away as 6 hexes, and the falling buildings destroy the track.) If the cruise missiles get the train itself – which means waiting until at least turn 2 and probably losing one or more crawlers to the tower – or the first track hex the train must enter on – which should be so well guarded by infantry that it would be a mistake to shoot at it – they might win. There's no way the defenders can provide an adequate defense for that long stretch of track against 3-5 cruise missiles (a good way to try, though, is a MSL every 9 hexes) and still have enough armor to keep 15 HVYs from getting through and destroying hex S-0413. So all they can do is provide an inadequate defense, hope to get lucky, and probably get a draw. My suggestions for lasers are S-0117 and S-0708 (and the tower in, say, S-0903).



Anyone who brings something as archaic as a train anywhere near cruise missiles shouldn't expect to see it get through anyway.

## “NUTS”

“Nuts!”, a scenario which takes place on the *Shockwave* map, is supposed to be a Bastogne-like breakout of a surrounded force. The fact that the attackers are spread out around a 15-hex-diameter circle and the advantage of the first move are supposed to compensate the defender for the short end of the 35-20 odds in armor units. Unfortunately, the defenders have an administration building so valuable that if they escape intact but lose the building, they lose. *[Actually, the building declines in value as the turns pass; it is there specifically to keep the defenders from running away instantly – SJ Y2K]* Therefore the attackers have no reason to prevent the defenders from escaping, so instead of spreading out around the circle, they concentrate everything in one place, make a standard line assault, and grind up the defenders with greater numbers. This scenario needs a change in victory conditions: I suggest removing the building, which lets the defenders run, and letting them escape from the east and south edges as well as the north, which forces the attacker to spread his forces out.

## “SUPER CP”

This is not really a new-units scenario: It's a large game of *Ogre*, where the defender gets 30 armor, 40 infantry and two Mark III Ogres, against the attacker's two Mark Vs. The CP is a building with strength 60, which takes some grinding (or a good overrun) to destroy. Have fun!

## CONCLUSION

To summarize, *Shockwave* is what we've all been waiting for: an innovative, interesting expansion of *Ogre/G.E.V.* The game with cruise missiles and lasers around is sharper and more exciting (no more complacency when you're out of range – you're never out of range), if a bit more luck-dependent. I'd like to extend to all concerned my congratulations on a job well done, and I look forward to a lot of fun.

This appeared in the letter column of *Space Gamer* 74, back in 1985. I don't think it ever got the attention it deserved. Of course there would be something like this in any army, and it does offer some interesting tactical possibilities.

I'd suggest two changes, though. In the first place, I don't think I'd bother with this unit . . . I'd send it out with a good escort!

In the second place: Yes, it could bridge streams. But not rivers or swamps, not on the scale of this game. Remember, a hex is 1.5 kilometers across! Bridging that distance is a job for a whole unit of engineers, not a single vehicle. But there's an interesting scenario there . . .

## THE MOBILE BRIDGE: A NEW OGRE/G.E.V. UNIT

By Michael LaBossiere

One of the most important obstacles to modern combat units is water in its many forms. In *Ogre/G.E.V.*, streams, rivers, and swamps can greatly slow down an attack or impair retreat. A partial solution to the problem is a special unit known as the Mobile Bridge, or MB.

The MB's function is to create temporary bridges across streams, rivers, and swamps. It consists of a flat, treaded vehicle equipped with folding panels and flotation units for constructing bridges. It has a defense of 2, a movement of 2, an attack of 1, and a range of 1. It is affected by terrain as a heavy tank and follows all movement, ramming, carrying rules, etc., as a heavy tank. The only difference is that the MB can move into a river hex at a cost of 2 movement points. It costs one armor unit to purchase.

The MB can make a bridge across one hex of stream, river, or swamp. It takes it no time, except for moving into a hex adjacent to a stream, to establish a bridge across a stream. (*Clearly, it can bridge a stream hexside from either side; it just has to be adjacent to the stream. – SJ*) It takes it one full movement phase to establish a bridge over a river hex or a swamp. During that phase it cannot move, and other units cannot cross it.

Once put up, the MB bridge is treated exactly as a regular bridge, except that only heavy tanks or smaller units may cross it. Ogres, Missile Crawlers, etc. are far too large and heavy for the MB to support.

The MB may hold only one unit at a time as it crosses. To simulate this, the 1 MP a unit takes to cross to the other side is subtracted from the MP of the other units attempting to cross. This subtraction is cumulative for subsequent units using the MB that turn. For example, a light tank (M2) crosses and moves one hex forward.

Behind it, a heavy tank (M3, but 1 is subtracted) moves across and one hex forward. The next heavy tank (also M3) moves onto the bridge but cannot move further, since waiting for the other units to cross the MB used up two of its movement points.

Combat and miscellaneous rules are as follows. A unit on the MB when it is destroyed is not destroyed unless it is not a water-capable unit and is dumped into a river. To clarify, a unit that can move in a stream or swamp will not be destroyed by the destruction of the MB, as it is low enough for the fall to be of little consequence. However, the unit must check terrain. For example, a heavy tank on a MB that is destroyed may get stuck in the swamp beneath it.

If a unit on the MB is attacked, the MB suffers normal spillover fire (and vice versa). The MB itself can always fire as long as it is not disabled, even when a unit is crossing it. Disabling a MB, in addition to its regular effects, prevents the MB from putting up or taking down its bridge. The MB must spend the same time it took putting it up to take it down. The MB may not move unless its bridge is folded up.

I have found the MB to be very useful when my opponent has destroyed the bridges I must cross to attack him. An MB or two is very useful in attacking from an unexpected angle, or to get at infantry who have holed themselves up in a swamp. Another rule I have experimented with allows the MB to use its cranes, winches, and flotation devices to pull out a unit trapped in the swamp: a roll of 5 or 6 on 1 die to free a heavy tank, and a 6 to free a Ogre. It would take one movement phase to free a heavy tank, two to free a missile crawler, three to free an Ogre Mark III, and four to free a Mark IV or V.



I really enjoy multi-map scenarios. Other than the idea of combining "Breakthrough" and "Raid" into one game, I think this was the first one I ever created that was good enough to share.

The idea of a shipping container full of hoverjocks in suspended animation is, I admit, a bit farfetched. But I've seen sillier setups in many an adventure novel, and it does

lead to a good game. As with "Appointment with Glory," sometimes it's easier to come up with a really interesting idea for a battle than it is to explain how those forces actually came into conflict.

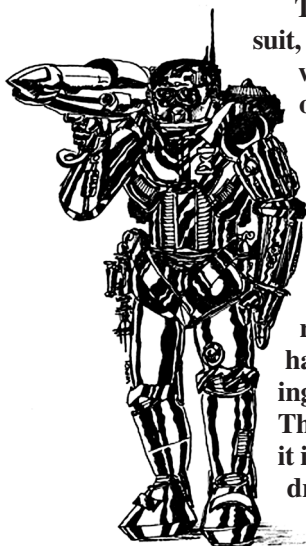
The GEV jocks are named after *Ogre* players who were active at the time this was first published, in 1984.

# OPERATION NEWSPAPER

## By Steve Jackson

The briefing room was noisy, as was to be expected from any room full of hover jockeys. But when the door opened, the rowdiness died down to a buzz. Not that this crew was especially respectful of authority . . . they weren't. But they were full of questions, and it looked as though today they would get some answers.

The room lights dimmed, and an unfamiliar colonel – Intelligence, by the brassard – stepped to the lectern. "I'm sure you have all been wondering why we pulled you stateside for a month of training on Paneuropean equipment," he began. Stating the obvious, of course, like any briefing officer. Then the bombshell came. "You're going to be using that equipment on the 20th of this month, for a raid on Emden."



This illustration of a battle-suit, drawn by Winchell Chung, was in the very first edition of *OGRE*. Unfortunately, it was rendered as a halftone screen over type . . . which is not easy to get right, especially if you're not printing on glossy paper. The result was that the rules on that page were a bit harder to read, and the drawing was little more than a blur. There was nowhere else to fit it in the book, so it was dropped from later editions.

Suddenly everyone was talking all at once. The colonel calmly waited for the furor to die down. "No, gentlemen, I assure you, we are perfectly aware that the Emden complex is a considerable distance from the front. We're going to put you in there right under the Micks' noses, and we're going to get you out again. And, in the meantime, you're going to kick some ass . . ."

\* \* \*

"Operation Newspaper" is a *Shockwave* scenario representing a raid and reconnaissance mission on a Paneuropean rear area. Sixteen Combine pilots, using captured Paneuropean equipment, are covertly inserted in a small port facility near Emden. Their mission: recon the area, create as much trouble as possible, and get out again.

**Map:** Use both the *Shockwave* and *G.E.V.* maps, with the *G.E.V.* map set up to the east.

**Setup:** The Paneuropean player (white) sets up first. He gets the following forces:

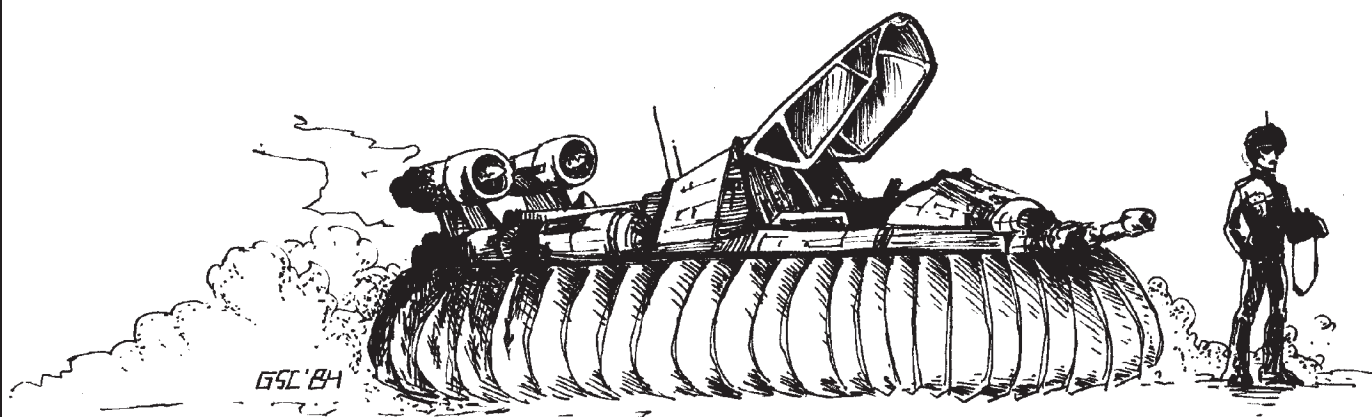
Two laser towers, two 20 SP lasers, and all the other white building counters supplied with the *Shockwave* set (i.e., a total of 19 buildings, counting the lasers and laser towers). These counters are set up anywhere on either map, with the following restrictions: (a) no more than one building may be located in any vertical row of hexes; (b) no building may be within 6 hexes of any other building. Buildings may be set up in water hexes; such buildings are assumed to be on islands or pilings, and not underwater.

One 3-1 infantry unit in each of the following hexes: S-0215, S-0710, 0404, 2203.

One 3-1 marine unit in each of the following hexes: S-2315, S-0307.

Five trucks in each of the following hexes: S-1515, S-1615.

*The first LGEV drawing, from Graham Chaffee.*



Two hovertrucks in each of the following hexes: S-1210, S-1310, S-1409, 1611.

Two Heavy Tanks in S-2304.

One GEV in each of the following hexes: 0416, 1513, S-1907.

One LGEV in each of the following hexes: S-1120, S-2105, 1611.

All building counters are set up upside down except for the two laser towers. All other units are right-side-up.

The Paneuropean player will also receive reinforcements as listed below.

The Combine (black) player may study the setup after the Paneuropean player has placed all buildings and units. He may then pick any six building counters and expose them (these are the installations already known to Combine intelligence). Finally, he places his force – 16 LGEVs – on one of the following three hexes: 0413, 2113, or S-0313, and secretly writes down which map (*Shockwave* or *G.E.V.*) he will escape from. The Combine player moves first, obeying stacking limits after his first move.

\*\*\*

Captain Griffith shook his head heavily. As his eyes cleared and he took in his surroundings, he grinned. “We made it, didn’t we?” The small man in gray, bending over him with a syringe, nodded. “Yes, Captain. You made it. Now, if you will help me with the others . . .” Twenty minutes later, the whole team was awake. Griffith shook his head in amazement. Everything was going right, for once. The hibernation drug was better than 95% effective, but he’d been sure he’d lose at least one man.

The 16 hovercraft pilots, and the one small spy, were alone in a cavernous warehouse. All about them were the shadowy bulks of huge shipping containers. One was open; the pilots had ridden to Emden in it. As they

watched, the agent used an electronic key to unseal two others. “Here are your machines, gentlemen. Let’s get them checked out.”

As they worked, one of the other pilots waved a hand at Griffith. “Sir? Did they tell you how they did this? I mean . . .” He waved his hand at the warehouse.

“Just what they told all of us, Bob,” came the reply. “Our boys captured the container ship, threw three cases of tractor parts overboard, and put us on instead. If you want the details, you can talk to CIS.” The pilots looked expectantly at the man in gray, but he smiled and shook his head.

“Well, if they could send us in like that, why not just make it simple and smuggle in one great big bloody fusion bomb?” The speaker hadn’t really expected an answer to that, but he got one. “Because, son, if we vaporized Emden, they’d just write it off, switch over to Ilyagrad and Prague, and keep right on going. But if we knock everything down, but leave it fixable, they *will* fix it. It’ll take them two years, and they’ll be soft that whole time. We really do more damage this way – and we make points for ‘restraint’ with the neutrals.”

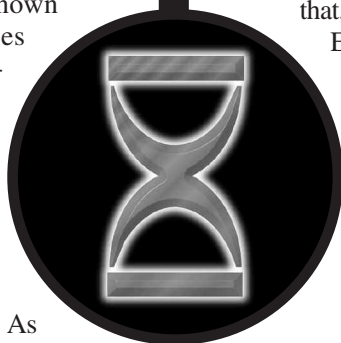
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**Beginning play.** After exposing 6 building counters (plus the two laser towers that started the game exposed), the Combine player picks his entry hex and escape map, and takes his first move. The Paneuropean player may not move until he has been “alerted,” as described below.

\*\*\*

The warehouse door groaned open and the little hovercraft slid out into the darkness. Griffith’s earphone buzzed. “Red Leader, this is Red Three.”

“Go ahead, Red Three.”



"I forgot to ask. Why did they say this 'Operation Newspaper'?"

"It's from something a fellow said a couple hundred years ago. A publisher. He said, 'The purpose of a newspaper is to report the news and raise hell.'"

"Huh?"

"That's what we're going to be doing, Howie. Reporting the news . . . and raising hell."

\*\*\*

**Paneuropean alert.** Since the Combine units' insertion was accomplished by stealth, Paneuropean units may not act until they are alerted. Alert takes place automatically if Combine units (a) enter any building hex; (b) make any attack; (c) pass within two hexes of any Paneuropean armor unit; (d) pass within one hex of any Paneuropean infantry or marine unit.

Whenever a Combine LGEV passes within 3 hexes of any building, the Paneuropean player rolls 2 dice. On a roll of 11 or 12, the intruding LGEVs were recognized as intruders and an alert has been sounded. Roll at the end of the Combine turn; roll once for each building approached, regardless of how many LGEVs pass nearby, or when (in the turn) the LGEVs passed within 3 hexes.

When an alert occurs, all Paneuropean units can move and attack immediately. Any Paneuropean attacks made on the first turn after alert are at a disadvantage; subtract 1 from the die roll. Note that if any Paneuropean units are the targets of overrun attacks, they will be alerted by the attack and will fire first – but still at a -1 to the die roll.

Until the Paneuropean units are alerted, they do not move at all; the Combine player just takes one turn after another.

\*\*\*

The raiders spread out over the countryside. Reports came in: an office complex here, a laser there, a nuclear reactor over there, a truck convoy poking along the road somewhere else. It was less than ten minutes before Griffith thought he had the picture. "Red Leader to all units; we start shooting in four minutes. Here are your sectors and first targets . . ."

Four minutes later, Red Team was cruising along a hillside overlooking a brand-new nuclear reactor complex. The countdown reached zero. Guns firing, Red Team hot-dogged down the hill toward their first target. Shortly thereafter, the lights went out.

\*\*\*

**Building identification.** One of the Combine raiders' chief objectives is to identify buildings (and to destroy them, if possible). As per *Shockwave* section 5.06, a building is automatically identified if a Combine unit approaches within 3 hexes. Once the building is identified, turn it right-side-up. Remember to roll for alerting, if the Paneuropean forces are not yet alert.



Once he has been alerted, the Paneuropean player may attack with his lasers and laser towers. When a laser attacks, it is automatically identified and turned right-side-up.

\*\*\*

"Blue Leader to all units. We just made ID on the target at S-2011, the hard way. It's a laser, and it's active."

"Red Leader to all Green units; it's your target. Take it out. Red Leader to Blue Leader – any casualties for you? You look OK on my screen."

"Blue Leader to Red Leader. We're OK. Bailey got scorched, but they quit tracking him to go after Vail, and I think he'll be moving again before . . ."

"Green Two to all units. Laser at S-2011 neutralized."

\*\*\*

**Reinforcements.** Once the Paneuropeans have been alerted, they get reinforcing units according to the following table. The Paneuropean player rolls two dice at the beginning of each of his turns and gets the resulting unit(s) as reinforcements.

|                |                                   |
|----------------|-----------------------------------|
| 2 . . . . .    | Superheavy Tank                   |
| 3, 4 . . . . . | Heavy Tank                        |
| 5 . . . . .    | Missile Tank                      |
| 6 . . . . .    | Two light tanks (together)        |
| 7 . . . . .    | 3-1 infantry unit                 |
| 8 . . . . .    | LGEV                              |
| 9 . . . . .    | GEV                               |
| 10 . . . . .   | GEV-PC carrying 3-1 infantry unit |
| 11 . . . . .   | 3-1 marine unit                   |
| 12 . . . . .   | Two light tanks (together)        |

The reinforcing units appear according to the following table (roll 2 dice):

|                  |                  |
|------------------|------------------|
| 2, 3 . . . . .   | S-0401 (on road) |
| 4 . . . . .      | S-1801 (on road) |
| 5 . . . . .      | 0401 (on road)   |
| 6 . . . . .      | 2304 (on road)   |
| 7 . . . . .      | 2315 (on road)   |
| 8 . . . . .      | 1822 (on road)   |
| 9 . . . . .      | 0422 (on road)   |
| 10 . . . . .     | S-1822 (on road) |
| 11, 12 . . . . . | S-0422 (on road) |

The entry hex of a reinforcing unit counts as its first hex of movement; reinforcing units are eligible for the road movement bonus on their first turn. If the road is cut, blocked by rubble, or occupied by an enemy unit, reinforcing units may enter on another hex, as close as possible to the designated one, but do not get the road bonus. The Paneuropean player may decline any reinforcement that he does not want, but may not delay it until a later turn.





Wow. Winch saved my original scrawled sketch for the cover. The original was in red and black, not that that helped much. The diagonal feature is a missile launching from the back of a more or less conventionally shaped tank, moving toward the right, with two big guns in front. The Ogre tower is not on this sketch – that was Winch's idea – but did the diagonal line of the missile suggest it?

**Destruction of reactors.** There are two Paneuropean reactors on the map. Their destruction will cause fluctuations in the local power net, temporarily damaging the defenders' ability to communicate with local CPs and therefore to target enemy units. (Since this is a rear area, the system is not as multiply-redundant as it should be.) If one reactor is destroyed, the Paneuropean player must subtract 1 from each attack roll he makes for the next 3 turns. If the second reactor is destroyed, the Paneuropean player must subtract 1 from each attack roll he makes for the next 5 turns. If these time periods overlap, the 5-turn period starts as soon as the second reactor is destroyed.

**Escape.** The game ends when all surviving Combine units have escaped. To escape, a Combine unit must leave the map on one of the water hexes, S-0106 through S-0114, or 2306 through 2314. From there, they can reach the ocean for pickup. Before the game starts, the Combine player must designate which map he will escape from; the hexes on the other map are considered part of a lake, and are not valid escape hexes. This does not represent any Paneuropean uncertainty as to the location of the ocean, but rather the shock value of the sudden attack – the defenders aren't sure what is going on, or what the real tactical picture is.

Some Paneuropean units (i.e., trucks) may wish to escape to avoid destruction by the raiders. They may escape by leaving the north or south edge of either map; the raiders won't follow them that far.

\* \* \*

The seven remaining hovercraft buzzed toward the harbor. Griffith studied his screen. Nothing ahead but some infantry in the buildings – and those could be evaded. He activated his mike and gave orders. But, even as he did, the screen image changed. Some of those infantry units were moving east, into the water. That meant one of two things. Either their commander was crazy, or those troops were marines.

\* \* \*

**Winning the game.** Only the Combine player accrues victory points in this scenario. He scores as follows:

- 40 for each strongpoint destroyed
- 40 for each reactor destroyed
- 25 for each admin building destroyed
- 20 for each laser or laser tower destroyed
- 10 for each 1-hex ("river") bridge destroyed, including RR bridges
- 5 for each small bridge destroyed, including RR bridges
- 3 for each truck or hovertruck destroyed
- 1 for each point of fire directed into a town hex by either side. (Each point of fire does one point of damage to a town hex. 12 points of damage turn the town to rubble, and no further damage can be done. For overrun combats, count each unit participating in the combat, regardless of type, as doing 1 point of damage to the town.)
- Standard victory points for each enemy combat unit destroyed.

If some of the LGEVs escape, the Combine player scores further victory points as follows:

20 for each LGEV that escapes. However, no more than half the Combine's VP total can be from escaped LGEVs, to prevent the Paneuropean player from firing a few token shots and then withdrawing his whole force.

10 for each building identified (regardless of whether or not it was destroyed). The 8 buildings identified at the start of play do not count. No identification counts for points unless at least one LGEV escapes after that ID is made . . . somebody has to carry the word back!

This scenario requires more victory point "bookkeeping" than most *Ogre/G.E.V.* games. Players are advised to set up a sheet of scratch paper at the beginning of the game, and to use

the BRIDGE OUT and RUBBLE counters from *Shockwave*.

**Victory levels.** The degree of success of the Combine mission is determined as follows:

Less than 125 points: Total failure. Mission planners will be demoted in rank or court-martialed.

125-250 points: Poor results. Mission planners are not likely to be promoted again.

251-500 points: Routine results, barely justifying the expenditure for the mission.

501-750 points: A successful mission, well worth the expenditure of men and material. Commendations all around.

Over 750 points: A smashing success. Mission planners will be promoted. Surviving raiders will be promoted and decorated.

**Solitaire play.** This is a good solitaire scenario. The player sets up the buildings upside-down and randomly, except for the laser towers and lasers. These four units start right-side-up, and the player turns 4 more buildings over at random. Since the player is thus prevented from strategically locating the buildings for a good defense, and from attacking the LGEVs with laser fire before lasers are identified, adjust all VP requirements by 50 points in the defender's favor.

**Optional rule: suitcase nuke.** The attacker may take one "suitcase" nuclear charge. This is carried by one LGEV; designate that unit by stacking the "missile" counter underneath. The LGEV carrying the nuke has a movement of only 3/1 until it drops the nuke (which it may do at any time). Once the nuke is dropped, it may not be recovered, and enemy forces may not interfere with it (they don't know it's there). The Combine player may set off the nuke at any time; its effects are exactly the same as those of a Cruise Missile in *Shockwave*.

Note that the nuke is a good tool for destroying town hexes. An "X" result on a town turns it to rubble; a "D" result has (for game purposes) no effect. Because of the power and expense of the nuke, adjust all VP requirements by 150 points in the defender's favor.

\* \* \*

The darkened streets roared with the passage of Griffith and his men. Fire jumped from a building ahead of them. One of the oncoming buggies slewed and recovered. Return fire demolished the building and its unlucky occupants. Then they were at the harbor. The machines jinked and slewed, seeking a smooth transition from land to water. They found it. Then the surface of the water, ahead of them, lit up.

"Hit them together, boys! Follow me!" The other hovercraft followed the leader, adopting an arrow formation, charging toward the line of waiting marines, rocking on

the water in their battlesuits. Then contact – and everything was chaos. The ocean boiled with men and explosions. The LGEV to Griffith's right vanished in a fireball; the one behind it ran into a swell and broke up. A Mick trooper broke from the water right in front of him, swooping low like a jet-assisted dolphin. Then, as Griffith's gun tracked him, the trooper simply fell apart – more like a machine than a man. A hoarse scream came over the radio: Griffith couldn't tell who it was, but a light on his board went out as the screaming stopped.

Then it was over. Four tiny GEVs sped across the water toward a North Sea rendezvous. Behind them, Emden was burning.

\* \* \*

## SCENARIO NOTES

This scenario was conceived as a "showcase" for the new LGEV unit. It's cheap and fast-moving, but not too hard-hitting . . . and it *cannot* stand up to a firefight! The only tactics that will work for an all-LGEV force are hit-and-run. The farther into the game you get, the less time the LGEVs will have to "hit," and the more they'll need to run!

The attacker can bring off a substantial victory by patient, cowardly tactics. Don't fight unless it's necessary – but don't miss a chance to destroy enemy units before they can hit you. With a unit as weak as the LGEV, instituting an overrun is purely a desperation tactic. Unless, of course, the enemy can't shoot back. A single LGEV can raze almost any building in a single turn, just by making one overrun after another. Each movement point spent in overrunning is worth 1 attack strength  $\times$  4 overrun multiplier  $\times$  2 fire rounds = 8 structure points of damage – for each LGEV. That's a lot of damage – but then, four minutes is a long time when you're firing tacnukes at a large, helpless target!

The defender is at a disadvantage until he can get organized and pull some sort of force together. Protect the buildings – especially the laser towers – but your first priority is organization! Don't ignore reinforcements just because they seem badly placed. Between the speed of the LGEVs and your own uncertainty about their objectives, no unit on the map is guaranteed worthless until the game is over.

Game balance. The easiest way to change the balance, if you find that one side wins consistently, is to change the number of lasers the Paneuropeans have. Even one laser makes a big difference. For a smaller change, let the Paneuropean lasers be 30 or 40 SP instead of 20.

Variation. Try the same thing with 8 regular GEVs instead of 16 LGEVs. The bigger GEVs are tougher, but they can't be in as many places at once! And attrition from lasers is more damaging when you start with only half the number of units.

**K**enneth Hite thinks about more different things, in more different ways, and brings them together into more interesting combinations, than anyone I have ever known. His regular *Pyramid* column, "Suppressed Transmission," frequently offers alternate histories . . .

worlds in which something went strangely *differently*. When *GURPS Ogre* was released, Ken turned his attention to the idea of massive fighting machines in other times and places. Go ahead, drop your Mark V miniature into the middle of that Civil War or Napoleonic game . . .

## TANKS FOR THE MEMORIES: ALTERNATE OGRES

by Kenneth Hite

*"The tale of the 21st century has no happy ending – dictatorial empires dominate it, and dictatorial fiefdoms follow it. Some players may not want to play in a universe where everything is doomed to fall into anarchy.*

*So change it!"*

– Jonathan Woodward, *GURPS Ogre*

As *GURPS Ogre* growls its way into our mental HUDs, one thing becomes rapidly apparent: giant, sentient, most likely malevolent tanks are just too neat to keep penned up in the 21st century. The first option, of course, is pure and simple *GURPS Time Travel*. Suppose Paneurope develops a time gate and shoots a Huscarl back to World War II to help Hitler (or Charlemagne) unify the continent seven decades (or 12 centuries) early. Of course, before temporal inertia breaks, the Combine launches a desperate attack, seizes the time portal, and sends its own Mark IV (or a team of PC Ogre-killers) back to take over the Allied (or Abbasid) war effort and stop the increasingly-independent Paneuropean cybertank. If your love of giant tanks won't wait, however, here are four more OGREISH histories to churn up your gaming battlefield.

*"Thus by such victory, not by machines, but in opposition to the principle of machines, has the freedom of states been preserved by the cunning of architects."*

– Vitruvius, *On Architecture*, Book X

The Emperor Trajan couldn't believe his luck. The Han, rulers of far Cathay, had apparently declared war on

the Parthians over some trade routes in Central Asia. His legions marched into Parthia, seizing Mesopotamia, and then the Persian highlands, and then the roads into India. He dreamed of emulating Alexander – until the waves of broken refugees told him of the horrible Han "moving fortresses." Han alchemists prepared the metals and powders (and bound the spirits) that gave these deadly *gui* (a word meaning both "tortoise" and "evil ghost") their

life and power. Clad in impervious metal chi,

they moved by themselves across the ground, spitting fire chi from long lances; the most powerful of their spells could leave craters where whole armies had formed.

Trajan's military genius was taxed to the utmost managing a fighting retreat back to the Euphrates. Time and again, his legions formed up against the Han, and time and again, the *gui* thrust them aside.

Now, in 105 A.D., Trajan desperately fortifies the Roman borders against the next spring's campaign. Hopefully, the crash alchemical program in Alexandria (studying fragments of captured Han armor and fire-lances) will be able to develop weapons and magics capable of stopping the Han onslaught, or Rome herself will burn under the fires of the tortoise-ghosts.

The PCs in this *GURPS China-Imperial Rome-Ogre* milieu can be cinematically unkillable Roman warriors straight from the pages of David Drake, refugee yogic martial-arts masters from India, Parthian Magi, or Egyptian experimental magician-engineers.





“‘[W]hat is the matter?’ said one. ‘Speak out.’ ‘Are we threatened with a fresh Reign of Terror?’ asked another. ‘Has the Corsican ogre broken loose?’ cried a third.”  
 – Alexandre Dumas, *The Count of Monte Cristo*

The mysterious chess-playing automaton of M. Maelzel only became a threat to the peace of Europe when its path crossed that of Franz Mesmer – and Napoleon Bonaparte. Not even British intelligence can say who thought of combining the chess-player with mesmeric direction, although lurid rumor maintains that it was, in fact, the automaton who first made the suggestion by means of a printed card.

The dictator’s whim bankrolled Maelzel and Mesmer, along with the American steam pioneer Robert Fulton, to build a mesmerically-controlled clockwork steam-powered guns platform. *L’Ogre* steamed into Germany in 1805, mesmerically directed by Marshal Masséna, but operating its weapons as practically and as efficiently as a master chess-player. The effect on the Austrian armies was terrific; they disintegrated and the French mopped up the Russians at Austerlitz.



In 1806, Fulton built an ironclad steam float for *L’Ogre*, and Napoleon himself went under mesmeric trance to direct it in the invasion of England. The British fleet was unable to match *L’Ogre*’s firepower, but an unlucky hit blew up the ship on which the entranced Napoleon rode. The automaton became infuriated; when it rolled onto British soil, it drove



straight for London, somehow using mesmeric force to vastly increase the power of its guns and Congreve rockets. In ten hours, the city was a smoldering ruin, and *L’Ogre* announced that it was, in fact, *L’Empereur*; the Corsican genius’ mind having somehow transferred into the invulnerable body of the pneumatic death-machine. French troops moved in to occupy London, and in a lightning campaign, *L’Ogre* (the old name having stuck) crushed Prussia and Spain by 1807.

Under the mesmeric lash of the mad steam-emperor, Fulton and Maelzel work to create new *Ogres* to house the minds of Bonaparte’s brothers and favored marshals. America and Russia eye each other nervously, wondering which will be the mad mechanical dictator’s next target – and which will be called upon to ally itself with *les Ogres* on pain of devastation. Both have launched secret studies of mesmerism – and of steam. PCs (ideally powerful psis themselves) can be soldiers, sailors, or spies (or conspirators against the disembodied Bonaparte) in this Napoleonic-era *GURPS Psionics-Ogre* crossover.

“When I left the plantation, I drew a long breath, and felt as if I had escaped from an ogre . . .”  
 – Harriet Beecher Stowe, *Uncle Tom’s Cabin*

Nobody thought the war would last this long. Nobody expected the Confederates to give in to insane desperation, and actually try to build the Organo-Galvanic Reconnaissance Engine. But after Grant took Vicksburg, Jeff Davis listened to what his ordnance chief told him – that if that madman Donovan had read Frankenstein’s notes correctly, a steam-tractor could be directed by a disembodied human brain. Only one in a hundred could survive the procedure without going mad (and the survivors were none too stable), but if there was one thing the War Between The States had produced in abundance, it was amputees willing to do anything to move again – even have their brains removed and implanted into a galvanic webbing in the center of a deadly armored war-wagon.



The Union soon learned how to build their own steam-wagons, but the men fighting them were no match for the Reb O.G.R.E.s. Spraying naphtha and Gatling fire, the Rebel war machines smashed through Union lines in Tennessee and Virginia. After the first wave of "Lighthorse" O.G.R.E.s had proven the technology, the heavier, deadlier Mark II "Calhoun" models took the war north. Meanwhile, O.G.R.E. ironclads swept the blockade, and the British began funneling supplies to the Confederacy, eager to see America torn to shreds.

Although the Union still has the overwhelming advantage in men and equipment, only the South has Donovan and his O.G.R.E. devices. New York has burned twice, a Mark III "Pompey" leveled Washington, and Grant has only recently retaken Chicago's ruins. The entire Ohio Valley is a mire of ash and mud, as is the Potomac. PCs can fight on either side in the *GURPS Steampunk-Horror-Ogre* game in this increasingly post-apocalyptic America of 1877.

*"The Ogre does what ogres can,  
Deeds quite impossible for Man,  
But one prize is beyond his reach,  
The Ogre cannot master Speech:  
About a subjugated plain,  
Among its desperate and slain . . ."*  
— W.H. Auden, "August, 1968"

Konrad Zuse meant to take his advanced Z3 computer to Switzerland. But a shelled highway and missing road signs sent him right into the arms of the Red Army. Stalin's spies had already told him that the British and Americans were working on computers; he resolved that the Soviet Union would have Zuse's — and much more. The Cold War became a Computer War.



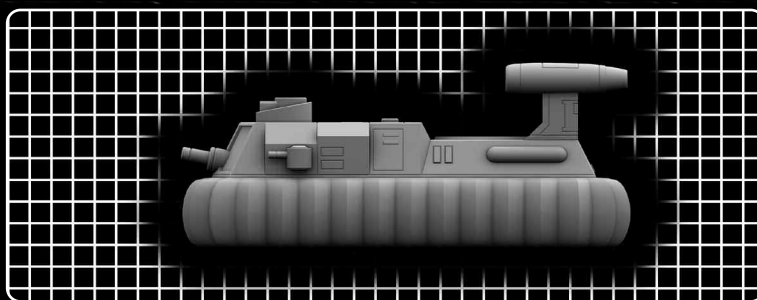
By 1948, both sides had deployed computer-and-radio-controlled tanks to Berlin. Experiments in guided missiles fed the development of computer-served, radar-controlled heavy rocket artillery. This paid dividends as both powers nuke-launched orbital weapons platforms. As the Soviets built ever larger (*Ogromniy*, "immense") computanks, the Americans and British worked to catch up. American armor proved the value of computanks when a squadron of 12 nuclear-armed O-52 Knoxes devastated four entire Chinese infantry divisions in Korea.

The American O-55 Grant was the first nuclear-powered, nuclear-artillery computank; the Russians deployed an equivalent *Ogromniy* the next year. Orbital platform space armor provided the inspiration for feedback-enhanced battlesuits; infantry picked up the new rocket-launchers and stepped back into the front lines. Both sides massed their computanks along the Iron Curtain, waiting for the signal to rumble. When Hungary rebelled against the Russians, a computer circuit in an O-53 Tom Paine decided that was the signal and launched, cutting into computer-encrypted mode to signal its fellows to drive into East Germany. The waves of bombers never made it past the orbital cannon, and World War Three turned into a ground fight.

This **GURPS Atomic Horror-Ogre** blend could support either grim, deadly military gaming, or a more radioactive and cinematic game of commando raids and Science! Perhaps the *Ogromniy* in Vladivostok and the American ON-53 Perry "seatanks" in the Sea of Japan must combine to battle Godzilla, or turn their mighty cannon to the skies to battle the menace from Mars. Whether the enemy is the Red Planet or the Red Army, it's good to have a superheavy O-57 Patton roll up for reinforcements — except these new computanks all seem to want to talk politics . . .

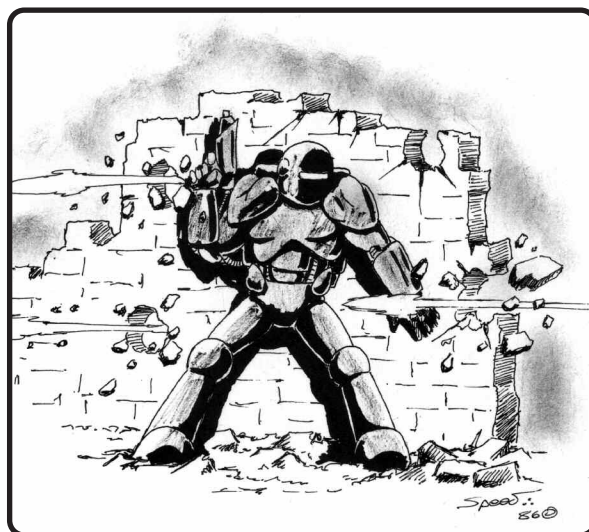


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